

JO

CAPT. FRANKLIN'S
JOURNEYS TO THE POLAR SEA.

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JOURNEY
TO THE
SHORES OF THE POLAR SEA,

IN 1819-20-21-22:

WITH

A BRIEF ACCOUNT OF THE SECOND JOURNEY

IN 1823-26-27.

BY

JOHN FRANKLIN, CAPT. R.N. F.R.S.

AND COMMANDER OF THE EXPEDITION.

FOUR VOLS.—WITH PLATES.

VOL. I.

LONDON:

JOHN MURRAY, ARMSHAW STREET.

MDCXXXIX.



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INTRODUCTION.



HIS Majesty's Government having determined upon sending an Expedition from the Shores of Hudson's Bay by land, to explore the Northern Coast of America, from the Mouth of the Copper-Mine River to the eastward, I had the honour to be appointed to this service by Earl Bathurst, on the recommendation of the Lords Commissioners of the Admiralty: who, at the same time, nominated Doctor John Richardson, a Surgeon in the Royal Navy, Mr. George Back, and Mr. Robert Hood, two Admiralty Midshipmen, to be joined with me in the enterprize. My instruc-

tions, in substance, informed me that the main object of the Expedition was that of determining the latitudes and longitudes of the Northerr Coast of North America, and the trending of that Coast from the Mouth of the Copper-Mine River to the eastern extremity of that Continent; that it was left for me to determine according to circumstances, whether it might be most advisable to proceed, at once, directly to the northward till I arrived at the sea-coast, and thence westerly towards the Copper-Mine River; or advance, in the first instance, by the usual route to the Mouth of the Copper-Mine River, and from thence easterly till I should arrive at the eastern extremity of that Continent; that, in the adoption of either of these plans, I was to be guided by the advice and information which I should receive from the wintering servants of the Hudson's Bay Company, who would be in-

structed by their employers to co-operate cordially in the prosecution of the objects of the Expedition, and who would provide me with the necessary escort of Indians, to act as guides, interpreters, game-killers, &c.; and also with such articles of clothing, ammunition, snow-shoes, presents, &c., as should be deemed expedient for me to take. That as another principal object of the Expedition was to amend the very defective geography of the northern part of North America, I was to be very careful to ascertain correctly the latitude and longitude of every remarkable spot upon our route, and of all the bays, harbours, rivers, headlands, &c., that might occur along the Northern Shore of North America. That in proceeding along the coast, I should erect conspicuous marks at places where ships might enter, or to which a boat could be sent; and to deposit information as to

the nature of the coast for the use of Lieutenant Parry. That in the journal of our route, I should register the temperature of the air at least three times in every twenty-four hours; together with the state of the wind and weather, and any other meteorological phenomena. That I should not neglect any opportunity of observing and noting down the dip and variation of the magnetic needle, and the intensity of the magnetic force; and should take particular notice whether any, and what kind or degree of, influence the Aurora Borealis might appear to exert on the magnetic needle; and to notice whether that phenomenon were attended with any noise; and to make any other observations that might be likely to tend to the further development of its cause, and the laws by which it is governed.

Mr. Back and Mr. Hood were to assist

me in all the observations above-mentioned, and to make drawings of the land, of the natives, and of the various objects of natural history; and, particularly, of such as Dr. Richardson, who, to his professional duties, was to add that of naturalist, might consider to be most curious and interesting.

I was instructed, on my arrival at, or near, the Mouth of the Copper-Mine River, to make every inquiry as to the situation of the spot whence native copper had been brought down by the Indians to the Hudson's Bay establishment, and to visit and explore the place in question; in order that Dr. Richardson might be enabled to make such observations as might be useful in a commercial point of view, or interesting to the science of mineralogy.

From Joseph Berens, Esq. the Governor of the Hudson's Bay Company, and the Gentlemen of the Committee, I received all

kinds of assistance and information, communicated in the most friendly manner previous to my leaving England; and I had the gratification of perusing the orders to their agents and servants in North America, containing the fullest directions to promote, by every means, the progress of the Expedition. I most cheerfully avail myself of this opportunity of expressing my gratitude to these Gentlemen for their personal kindness to myself and the other officers, as well as for the benefits rendered by them to the Expedition; and the same sentiment is due towards the Gentlemen of the North-West Company, both in England and America, more particularly to Simon M'Gillivray, Esq. of London, from whom I received much useful information, and cordial letters of recommendation to the partners and agents of that Company, resident on our line of route.

A short time before I left London I had the pleasure and advantage of an interview with the late Sir Alexander Mackenzie, who was one of the two persons who had visited the coast we were to explore. He afforded me, in the most open and kind manner, much valuable information and advice.

The provisions, instruments, and other articles, of which I had furnished a list, by direction of the Lords Commissioners of the Admiralty, were embarked on board the Hudson's Bay Company's ship Prince of Wales, appointed by the committee, to convey the Expedition to York Factory, their principal establishment in Hudson's Bay.

It will be seen, in the course of the Narrative, how much reason I had to be satisfied with, and how great my obligations are to, all the Gentlemen who were associated

with me in the Expedition, whose kindness, good conduct, and cordial co-operation, have made an impression which can never be effaced from my mind. The unfortunate death of Mr. Hood is the only drawback which I feel from the otherwise unalloyed pleasure of reflecting on that cordial unanimity which at all times prevailed among us, in the days of sunshine, and in those of "sickness and sorrow."

To Dr. Richardson, in particular, the exclusive merit is due of whatever collections and observations have been made in the department of Natural History; and I am indebted to him in no small degree for his friendly advice and assistance in the preparation of the present Narrative.

The Charts and Drawings were made by Lieutenant Back, and the late Lieutenant Hood. Both these gentlemen cheerfully and ably assisted me in making the obser-

ventions and in the daily conduct of the Expedition. The observations made by Mr. Hood, on the various phenomena presented by the Aurora Borealis,* will, it is presumed, present to the reader some new facts connected with this meteor. Mr. Back was mostly prevented from turning his attention to objects of science by the many severe duties which were required of him, and which obliged him to travel almost constantly every winter that we passed in America; to his personal exertions, indeed, our final safety is mainly to be attributed. And here I must be permitted to pay the tribute due to the fidelity, exertion, and uniform good conduct, in the most trying situations, of John Hepburn, an English seaman, and our only attendant, to whom in the latter part of our journey we owe,

* Given in the Appendix to the Quarto Edition.

under Divine Providence, the preservation of the lives of some of the party.

I ought, perhaps, to crave the reader's indulgence towards the defective style of this work, which I trust will not be refused when it is considered that mine has been a life of constant employment in my profession from a very early age. I have been prompted to venture upon the task solely by an imperious sense of duty, when called upon to undertake it.

In the ensuing Narrative, the notices of the moral condition of the Indians as influenced by the conduct of the traders towards them, refer entirely to the state in which it existed during our progress through the country; but lest I should have been mistaken respecting the views of the Hudson's Bay Company on these points, I gladly embrace the opportunity which a New Edition affords me of stating that the junction

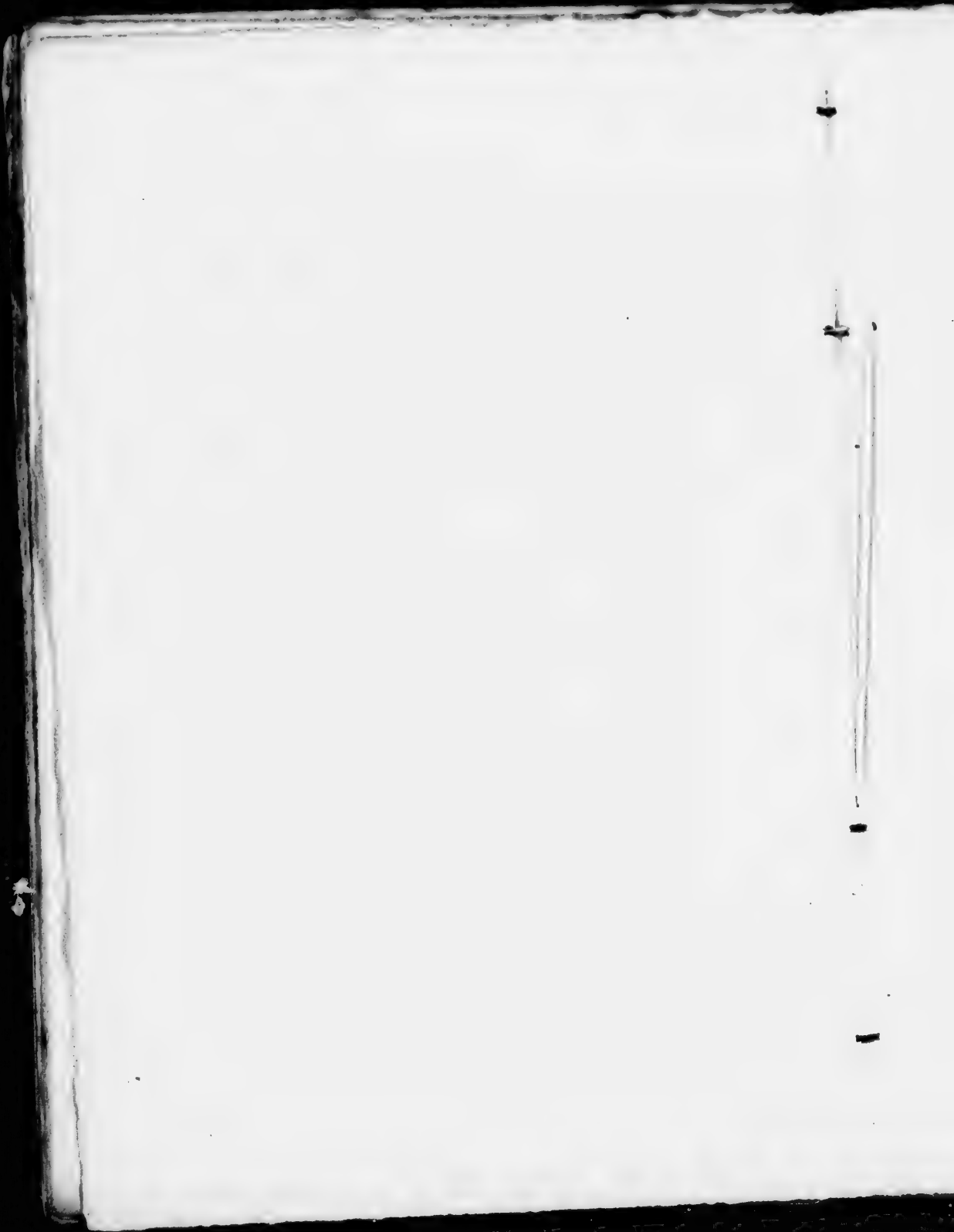
of the two Companies has enabled the Directors to put in practice the improvements which I have reason to believe they had long contemplated. They have provided for religious instruction by the appointment of two Clergymen of the Established Church, under whose direction school-masters and mistresses are to be placed at such stations as afford the means of support for the establishment of schools. The offspring of the voyagers and labourers are to be educated chiefly at the expense of the Company; and such of the Indian children as their parents may wish to send to these schools, are to be instructed, clothed, and maintained, at the expense of the Church Missionary Society, which has already allotted a considerable sum for these purposes, and has also sent out teachers, who are to act under the superintendence of the Rev. Mr. West, the principal chaplain of the Company.

We had the pleasure of meeting this gentleman at York Factory, and witnessed with peculiar delight the great benefit which already marked his zealous and judicious conduct. Many of the traders, and of the servants of the Company, had been induced to marry the women with whom they had cohabited; a material step towards the improvement of the females in that country.

Mr. West, under the sanction of the Directors, has also promoted a subscription for the distribution of the Bible in every part of the country where the Company's Fur Trade has extended, and which has met with very general support from the resident chief factors, traders, and clerks. The Directors of the Company are continuing to reduce the distribution of spirits gradually among the Indians, as well as towards their own servants, with a view to the en-

tire disuse of them as soon as this most desirable object can be accomplished. They have likewise issued orders for the cultivation of the ground at each of the posts, by which means the residents will be far less exposed to famine whenever through the scarcity of animals, the sickness of the Indians, or any other cause, their supply of meat may fail.

It is to be hoped that intentions, so dear to every humane and pious mind, will, through the blessing of God, meet with the utmost success.



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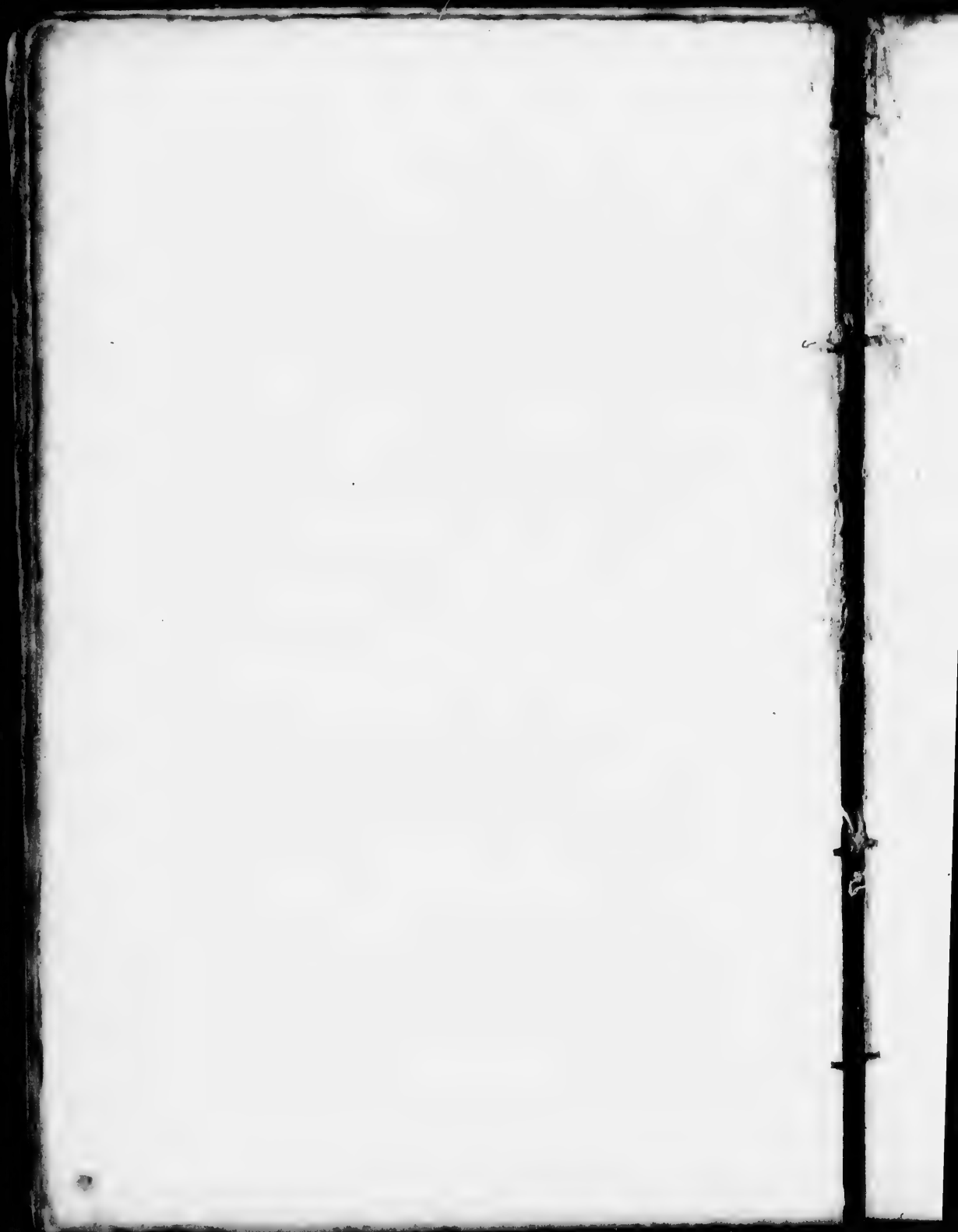
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JOURNEY TO THE SHORES OF THE POLAR SEA.

CHAPTER I.

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—Enter Davis' Straits—Perilous Situation on the
Shore of Resolution Island—Land on the Coast of
Labrador—Esquimaux of Savage Islands—York
Factory—Preparations for the Journey into the
Interior.*

ON Sunday, the 23d of May, 1819, the whole of our party embarked at Gravesend, on board the ship Prince of Wales, belonging to the Hudson's Bay Company, just as she was in the act of getting under weigh, with her consorts the Eddystone and Wear. The wind being unfavourable, on the ebb tide being finished, the vessels were again anchored; but they weighed in the night

and beat down as far as the Warp, where they were detained two days by a strong easterly wind.

Having learned from some of the passengers, who were the trading officers of the Company, that the arrival of the ships at either of the establishments in Hudson's Bay, gives full occupation to all the boatmen in their service, who are required to convey the necessary stores to the different posts in the interior; that it was very probable a sufficient number of men might not be procured from this indispensable duty; and, considering that any delay at York Factory would materially retard our future operations, I wrote to the Under Secretary of State, requesting his permission to provide a few well-qualified steersmen and bowmen, at Stromness, to assist our proceedings in the former part of our journey into the interior.

May 30.—The easterly wind, which had retarded the ship's progress so much, that we had only reached Hollesley Bay after a week's beating about, changed to W.S.W.

soon after that anchorage had been gained. The vessels instantly weighed, and, by carrying all sail, arrived in Yarmouth Roads at seven P.M.; the pilots were landed, and our course was continued through the anchorage. At midnight, the wind became light and variable, and gradually drew round to the N.W.; and, as the sky indicated unsettled weather, and the wind blew from an unfavourable quarter for ships upon that coast, the commander bore up again for Yarmouth, and anchored at eight A.M.

This return afforded us, at least, the opportunity of comparing the longitude of Yarmouth church, as shown by our chronometers, with its position as laid down by the Ordnance Trigonometrical Survey; and it was satisfactory to find, from the small difference in their results, that the chronometers had not experienced any alteration in their rates, in consequence of their being changed from an horizontal position in a room, to that of being carried in the pocket.

An untoward circumstance, while at this

anchorage, cast a damp on our party at this early period of the voyage. Emboldened by the decided appearance of the N.W. sky, several of our officers and passengers ventured on shore for a few hours; but we had not been long in the town before the wind changed suddenly to S.E., which caused instant motion in the large fleet collected at this anchorage. The commander of our ship intimated his intention of proceeding to sea by firing guns, and the passengers hastened to embark. Mr. Back, however, had unfortunately gone upon some business to a house two or three miles distant from Yarmouth, along the line of the coast; from whence he expected to be able to observe the first symptoms of moving, which the vessels might make. By some accident, however, he did not make his appearance before the captain was obliged to make sail, that he might get the ships through the intricate passage of the Cockle Gat before it was dark. Fortunately, through the kindness of Lieutenant Hewit, of the Protector, I was enabled to convey

a note to our missing companion, desiring him to proceed immediately by the coach to the Pentland Firth, and from thence across the passage to Stromness, which appeared to be the only way of proceeding by which he could rejoin the party.

June 3.—The wind continuing favourable after leaving Yarmouth, about nine this morning we passed the rugged and bold projecting rock, termed Johnny Groat's House, and soon afterwards Duncansby Head, and then entered the Pentland Firth. A pilot came from the main shore of Scotland, and steered the ship in safety between the different islands, to the outer anchorage at Stromness, though the atmosphere was too dense for distinguishing any of the objects on the land. Almost immediately after the ship had anchored, the wind changed to N.W., the rain ceased, and a sight was then first obtained of the neighbouring islands, and of the town of Stromness, the latter of which, from this point of view, and at this distance, presented a pleasing appearance.

Mr. Geddes, the agent of the Hudson's Bay Company at this place, undertook to communicate my wish for volunteer boatmen to the different parishes, by a notice on the Church door, which he said was the surest and most direct channel for the conveyance of information to the lower classes in these islands, as they invariably attend divine service there every Sunday. He informed me that the kind of men we were in want of would be difficult to procure, on account of the very increased demand for boatmen for the herring fishery, which had recently been established on the shores of these islands; that last year, sixty boats and four hundred men only were employed on this service, whereas now there were three hundred boats and twelve hundred men engaged; and that owing to this unexpected addition to the fishery, he had been unable to provide the number of persons required for the service of the Hudson's Bay Company. This was unpleasant information, as it increased the apprehension of our being detained at York Factory the whole winter,

if boatmen were not taken from hence. I could not therefore hesitate in requesting Mr. Geddes to engage eight or ten men, well adapted for our service, on such terms as he could procure them, though the Secretary of State's permission had not yet reached me.

Next to a supply of boatmen, our attention was directed towards the procuring of a house conveniently situated for trying the instruments, and examining the rates of the chronometers. Mr. Geddes kindly offered one of his, which, though in an unfinished state, was readily accepted, being well situated for our purpose, as it was placed on an eminence, had a southern aspect, and was at a sufficient distance from the town to secure us from frequent interruption. Another advantage was its proximity to the Manse, the residence of the Reverend Mr. Clouston, the worthy and highly respected minister of Stromness, whose kind hospitality and the polite attention of his family, the party experienced almost daily during their stay.

For three days the weather was unsettled, and few observations could be made, except for the dip of the needle, which was ascertained to be $74^{\circ} 37' 48''$, on which occasion a difference of eight degrees and a half was perceived between the observations, when the face of the instrument was changed from the east to the west, the amount being the greatest when it was placed with the face to the west. But, on the 8th, a westerly wind caused a cloudless sky, which enabled us to place the transit instrument in the meridian, and to ascertain the variation of the compass to be $27^{\circ} 50'$ west. The sky becoming cloudy in the afternoon, prevented our obtaining the corresponding observations to those gained in the morning; and the next day an impervious fog obscured the sky until noon. On the evening of this day, we had the gratification of welcoming our absent companion, Mr. Back. His return to our society was hailed with sincere pleasure by every one, and removed a weight of anxiety from my mind. It appears that he had come down

to the beach at Caistor, just as the ships were passing by, and had applied to some boatmen to convey him on board, which might have been soon accomplished; but they, discovering the emergency of his case, demanded an exorbitant reward, which he was not at the instant prepared to satisfy, and, in consequence, they positively refused to assist him. Though he had travelled nine successive days, almost without rest, he could not be prevailed upon to withdraw from the agreeable scene of a ball-room, in which he joined us, until a late hour.

On the 10th, the rain having ceased, the observations for ascertaining the dip of the needle were repeated, and the results, compared with the former ones, gave a mean of $74^{\circ} 33' 20''$. Nearly the same differences were remarked in reversing the face of the instrument as before. An attempt was also made to ascertain the magnetic force, but the wind blew too strong for procuring the observation to any degree of accuracy.

The fineness of the following day induced

us to set up the different instruments for examination, and to try how nearly the observations made by each of them would agree; but a squall passed over just before noon, accompanied by heavy rain, and the hoped-for favourable opportunity was entirely lost. In the intervals between the observations, and at every opportunity, my companions were occupied in those pursuits to which their attention had been more particularly directed in my instructions. Whilst Dr. Richardson was collecting and examining the various specimens of marine plants, of which these islands furnish an abundant and diversified supply, Mr. Back and Mr. Hood took views and sketches of the surrounding scenery, which is extremely picturesque in many parts, and wants only the addition of trees to make it beautiful. The hills present the bold character of rugged sterility, whilst the valleys, at this season, are clothed with luxuriant verdure.

It was not till the 14th, that, by appointment, the boatmen were to assemble at the house of Mr. Geddes, to engage to accom-

pany the expedition. Several persons collected, but to my great mortification, I found they were all so strongly possessed with the fearful apprehension, either that great danger would attend the service, or that we should carry them further than they would agree to go, that not a single man would engage with us ; some of them, however, said they would consider the subject, and give me an answer on the following day. This indecisive conduct was extremely annoying to me, especially as the next evening was fixed for the departure of the ships.

At the appointed time on the following morning, four men only presented themselves, and these, after much hesitation, engaged to accompany the expedition to Fort Chipewyan, if they should be required so far. The bowmen and steersmen were to receive forty pounds wages annually, and the middle men thirty-five pounds. They stipulated to be sent back to the Orkney Islands free of expense, and to receive their pay until the time of arrival.

Only these few men could be procured, although our requisition had been sent to almost every island, even as far as the northernmost point of Ronaldsha. I was much amused with the extreme caution these men used before they would sign the agreement; they minutely scanned all our intentions, weighed every circumstance, looked narrowly into the plan of our route, and still more circumspectly to the prospect of return. Such caution on the part of the northern mariners forms a singular contrast with the ready and thoughtless manner in which an English seaman enters upon any enterprise, however hazardous, without inquiring, or desiring to know, where he is going, or what he is going about.

The brig Harmony, belonging to the Moravian Missionary Society, and bound to their settlement at Nain, on the coast of Labrador, was lying at anchor. With a view of collecting some Esquimaux words and sentences, or gaining any information respecting the manners and habits of that

people, Doctor Richardson and myself paid her a visit. We found the passengers, who were going out as Missionaries, extremely disposed to communicate; but as they only spoke the German and Esquimaux languages, of which we were ignorant, our conversation was necessarily much confined: by the aid, however, of an Esquimaux and German Dictionary, some few words were collected, which we considered might be useful. There were on board a very interesting girl and a young man, who were natives of Disco, in Old Greenland; both of them had fair complexions, rather handsome features, and a lively manner; the former was going to be married to a resident Missionary, and the latter to officiate in that character. The commander of the vessel gave me a translation of the Gospel of St. John in the Esquimaux language, printed by the Moravian Society in London.

June 16.—The wind being unfavourable for sailing I went on shore with Dr. Richardson, and took several lunar observa-

tions at the place of our former residence. The result obtained was latitude $58^{\circ} 56' 56''$, N.; longitude $3^{\circ} 17' 55''$ W.; variation $27^{\circ} 50'$ W.; dip of the magnetic needle, $74^{\circ} 33' 20''$. In the afternoon the wind changed in a squall some points towards the north, and the Prince of Wales made the preparatory signal for sea. At three P.M. the ships weighed an hour too early for the tide; as soon as this served we entered into the passage between Hoy and Pomona, and had to beat through against a very heavy swell, which the meeting of a weather tide and a strong breeze had occasioned.

Some dangerous rocks lie near the Pomona shore, and on this side also the tide appeared to run with the greatest strength. On clearing the outward projecting points of Hoy and Pomona, we entered at once into the Atlantic, and commenced our voyage to Hudson's Bay, having the Eddystone, Wear, and Harmony Missionary brig, in company.

The comparisons of the chronometers

this day indicated that Arnold's Nos. 2148 and 2147 had slightly changed their rates since they had been brought on board; fortunately the rate of the former seems to have increased nearly in the same ratio as the other has lost, and the mean longitude will not be materially affected.

Being now fairly launched into the Atlantic, I issued a general memorandum for the guidance of the officers during the prosecution of the service on which we were engaged, and communicated to them the several points of information that were expected from us by my instructions. I also furnished them with copies of the signals which had been agreed upon between Lieutenant Parry and myself, to be used in the event of our reaching the northern coast of America, and falling in with each other.

At the end of the month of June, our progress was found to have been extremely slow, owing to a determined N.W. wind and much sea. We had numerous birds hovering round the ship, principally fulmars (*procellaria glacialis*), and shearwaters

(*procellaria puffinus*), and not unfrequently saw shoals of grampusses sporting about, which the Greenland seamen term finners, from their large dorsal fin. Some porpoises occasionally appeared, and whenever they did, the crew were sanguine in their expectation of having a speedy change in the wind, which had been so vexatiously contrary, but they were disappointed in every instance.

Thursday, July 1.—The month of July set in more favourably; and, aided by fresh breezes, we advanced rapidly to the westward, attended daily by numerous fulmars and shearwaters. The Missionary brig had parted company on the 22d of June. We passed directly over that part of the ocean where the "Sunken Land of Buss" is laid down in the old, and continued in the Admiralty charts. Mr. Bell, the commander of the Eddystone, informed me, that the pilot who brought his ship down the Thames told him, that he had gained soundings in twelve feet somewhere hereabout; and I am rather inclined to attri-

bute the very unusual and cross sea we had in this neighbourhood to the existence of a bank, than to the effect of a gale of wind which we had just before experienced; and I cannot but regret that the commander of the ship did not try for soundings at frequent intervals.

By the 25th July we had opened the entrance of Davis' Straits, and in the afternoon spoke the Andrew Marvell, bound to England with a cargo of fourteen fish. The master informed us that the ice had been heavier this season in Davis' Straits than he had ever recollected, and that it lay particularly close to the westward, being connected with the shore to the northward of Resolution Island, and extending from thence within a short distance of the Greenland coast; that whales had been abundant, but the ice so extremely cross, that few could be killed. His ship, as well as several others, had suffered material injury, and two vessels had been entirely crushed between vast masses of ice in latitude $74^{\circ} 40'$ N., but the crews were saved. We in-

quired anxiously, but in vain, for intelligence respecting Lieutenant Parry, and the ships under his command; but as he mentioned that the wind had been blowing strong from the northward for some time, which would, probably, have cleared Baffin's Bay of ice, we were disposed to hope favourably of his progress.

The clouds assumed so much the appearance of icebergs this evening, as to deceive most of the passengers and crew; but their imaginations had been excited by the intelligence we had received from the *Andrew Marvell*, that she had only parted from a cluster of them two days previous to our meeting.

On the 27th, being in latitude $57^{\circ} 44' 21''$ N., longitude $47^{\circ} 31' 14''$ W., and the weather calm, we tried for soundings, but did not reach the bottom. The register thermometer was attached to the line just above the lead, and is supposed to have descended six hundred and fifty fathoms. A well-corked bottle was also fastened to the line, two hundred fathoms above the lead, and

went down four hundred and fifty fathoms. The change in temperature, shewn by the register thermometer during the descent, was from 52° to 40.5° ; and it stood at the latter point, when taken out of the tin case. The temperature of the water brought up in the bottle was 41° , being half a degree higher at four hundred and fifty than at six hundred and fifty fathoms, and four degrees colder than the water at the surface, which was then at 45° , whilst that of the air was 46° . This experiment in shewing the water to be colder at a great depth than at the surface, and in proportion to the increase of the descent, coincides with the observations of Captain Ross and Lieutenant Parry, on their late voyage to these seas, but is contrary to the results obtained by Captain Buchan and myself, on our recent voyage to the north, between Spitzbergen and Greenland, in which sea we invariable found the water brought from any great depth to be warmer than that at the surface.

On the 28th we tacked, to avoid an extensive stream of sailing ice. The tempe-

perature of the water fell to 39.5° , when we were near it, but was at 41° , when at the distance of half a mile. The thermometer in the air remained steadily at 40° . Thus the proximity of this ice was not so decidedly indicated by the decrease of the temperature of either the air or water, as I have before witnessed, which was probably owing to the recent arrival of the stream at this point, and its passing at too quick a rate for the effectual diffusion of its chilling influence beyond a short distance. Still the decrease in both cases was sufficient to have given timely warning for a ship's performing any evolution that would have prevented the coming in contact with it, had the thickness of the weather precluded a distant view of the danger.

The approach to ice would be more evidently pointed out in the Atlantic, or wherever the surface is not so continually chilled by the passing and the melting of ice as in this sea; and I should strongly recommend a strict hourly attention to the themometrical state of the water at the surface, in

all parts where ships are exposed to the dangerous concussion of sailing icebergs, as a principal means of security.

The following day our ship came near another stream of ice, and the approach to it was indicated by a decrease of the temperature of the water at the surface from 44° to 42° . A small pine tree was picked up much shattered by the ice. In the afternoon of the 30th, a very dense fog came on; and about six P.M., when sailing before a fresh breeze, we were suddenly involved in a heavy stream of ice. Considerable difficulty was experienced in steering through the narrow channels between the different masses in this foggy weather, and the ship received several severe blows.

The water, as usual in the centre of the stream, was quite smooth, but we heard the waves beating violently against the outer edge of the ice. There was some earthy matter on several of the pieces, and the whole body bore the appearance of recent separation from the land. In the space of two hours we again got into the open sea,

but had left our two consorts far behind; they followed our track by the guns we discharged. The temperature of the surface water was 35° when amongst the ice, 38° when just clear of it, and 41.5° at two miles distant.

On the 4th of August, when in latitude $59^{\circ} 58' N.$, longitude $59^{\circ} 53' W.$, we first fell in with large icebergs; and in the evening were encompassed by several of considerable magnitude, which obliged us to tack the ship in order to prevent our getting entangled amongst them. The estimated distance from the nearest part of the Labrador coast was then eighty-eight miles; here we tried for soundings, without gaining the bottom. The ship passed through some strong riplings, which evidently indicated a current, but its direction was not ascertained. We found, however, by the recent observations, that the ship had been set daily to the southward, since we had opened Davis' Straits. The variation of the compass was observed to be $52^{\circ} 41' W.$

At nine P.M., brilliant coruscations of

the Aurora Borealis appeared, of a pale ochre colour, with a slight tinge of red, in an arched form, crossing the zenith from N.W. to S.E., but afterwards they assumed various shapes, and had a rapid motion.

On the 5th of August, a party of the officers endeavoured to get on one of the larger icebergs, but ineffectually, owing to the steepness and smoothness of its sides, and the swell produced by its undulating motion. This was one of the largest we saw, and Mr. Hood ascertained its height to be one hundred and forty-nine feet; but these masses of ice are frequently magnified to an immense size, through the illusive medium of a hazy atmosphere, and on this account their dimensions have often been exaggerated by voyagers.

In the morning of the 7th, the Island of Resolution was indistinctly seen through the haze, but was soon afterwards entirely hidden by a very dense fog. The favourable breeze subsided into a perfect calm, and left the ship surrounded by loose ice. At this time the Eddystone was perceived

to be driving with rapidity towards some of the larger masses; the stern-boats of this ship and of the Wear were despatched to assist in towing her clear of them. At ten, a momentary clearness presented the land distinctly at the distance of two miles; the ship was quite unmanageable, and under the sole governance of the currents, which ran in strong eddies between the masses of ice. Our consorts were also seen, the Wear being within hail, and the Eddystone at a short distance from us. Two attempts were ineffectually made to gain soundings, and the extreme density of the fog precluded us from any other means of ascertaining the direction in which we were driving until half past twelve, when we had the alarming view of a barren rugged shore within a few yards, towering over the mast heads. Almost instantly afterwards the ship struck violently on a point of rocks, projecting from the island; and the ship's side was brought so near to the shore, that poles were prepared to push her off. This blow displaced the rudder, and raised it several

inches, but it fortunately had been previously confined by tackles. A gentle swell freed the ship from this perilous situation, but the current hurried us along in contact with the rocky shore, and the prospect was most alarming. On the outward bow was perceived a rugged and precipitous cliff, whose summit was hid in the fog, and the vessel's head was pointed towards the bottom of a small bay, into which we were rapidly driving. There now seemed to be no probability of escaping shipwreck, being without wind, and having the rudder in its present useless state; the only assistance was that of a boat employed in towing, which had been placed in the water between the ship and the shore, at the imminent risk of its being crushed. The ship again struck in passing over a ledge of rocks, and happily the blow replaced the rudder, which enabled us to take advantage of a light breeze, and to direct the ship's head without the projecting cliff. But the breeze was only momentary, and the ship was a third time driven on shore on the rocky

termination of the cliff. Here we remained stationary for some seconds, and with little prospect of being removed from this perilous situation; but we were once more extricated by the swell from this ledge also, and carried still farther along the shore. The coast became now more rugged, and our view of it was terminated by another high projecting point on the starboard bow. Happily, before we had reached it, a light breeze enabled us to turn the ship's head to seaward, and we had the gratification to find, when the sails were trimmed, that she drew off the shore. We had made but little progress, however, when she was violently forced by the current against a large iceberg lying aground.

Our prospect was now more alarming than at any preceding period; and it would be difficult for me to pourtray the anxiety and dismay depicted on the countenances of the female passengers and children, who were rushing on deck in spite of the endeavours of the officers to keep them below, out of the danger which was apprehended

if the masts should be carried away. After the first concussion, the ship was driven along the steep and rugged side of this iceberg with such amazing rapidity, that the destruction of the masts seemed inevitable, and every one expected we should again be forced on the rocks in the most disabled state; but we providentially escaped this perilous result, which must have been decisive.

The dense fog now cleared away for a short time, and we discovered the Eddystone close to some rocks, having three boats employed in towing; but the Wear was not visible.

Our ship received water very fast; the pumps were instantly manned and kept in continual use, and signals of distress were made to the Eddystone, whose commander promptly came on board, and then ordered to our assistance his carpenter and all the men he could spare, together with the carpenter and boat's crew of the Wear, who had gone on board the Eddystone in the morning, and were prevented from return-

ing to their own vessel by the fog. As the wind was increasing, and the sky appeared very unsettled, it was determined the Eddystone should take the ship in tow, that the undivided attention of the passengers and crew might be directed to pumping, and clearing the holes to examine whether there was a possibility of stopping the leak. We soon had reason to suppose the principal injury had been received from a blow near the stern-post, and, after cutting away part of the ceiling, the carpenters endeavoured to stop the rushing in of the water, by forcing oakum between the timbers; but this had not the desired effect, and the leak, in spite of all our efforts at the pumps, increased so much, that parties of the officers and passengers were stationed to bail out the water in buckets at different parts of the hold. A heavy gale came on, blowing from the land, as the night advanced; the sails were split, the ship was encompassed by heavy ice, and, in forcing through a closely-connected stream, the tow-rope broke, and obliged us to take a portion of the seamen

from the pumps, and appoint them to the management of the ship.

Fatigue, indeed, had caused us to relax in our exertions at the pumps during a part of the night of the 8th, and on the following morning upwards of five feet water was found in the well. Renewed exertions were now put forth by every person, and before eight A.M. the water was so much reduced as to enable the carpenters to get at other defective places; but the remedies they could apply were insufficient to repress the water from rushing in, and our labours could but just keep the ship in the same state throughout the day, until six P.M.; when the strength of every one began to fail, the expedient of thrusting in felt, as well as oakum, was resorted to, and a plank nailed over all. After this operation a perceptible diminution in the water was made, and being encouraged by the change, we put forth our utmost exertion in bailing and pumping; and before night, to our infinite joy, the leak was so overpowered that the pumps were only required to be used at

intervals of ten minutes. A sail, covered with every substance that could be carried into the leaks by the pressure of the water, was drawn under the quarter of the ship, and secured by ropes on each side.

As a matter of precaution, in the event of having to abandon the ship, which was for some time doubtful, the elderly women and children were removed to the Eddystone when the wind was moderate this afternoon, but the young women remained to assist at the pumps, and their services were highly valuable, both for their personal labour, and for the encouragement their example and perseverance gave to the men.

At day-light, on the 9th, every eye was anxiously cast around the horizon in search of the Wear but in vain; and the recollection of our own recent peril caused us to entertain considerable apprehensions for her safety. This anxiety quickened our efforts to exchange our shattered sails for new ones, that the ship might be got, as speedily as possible, near to the land, which was but just in sight, and a careful search be made

for her along the coast. We were rejoiced to find that our leak did not increase by carrying sail, and we ventured in the evening to remove the sail which had been placed under the part where the injury had been received, as it greatly impeded our advance.

We passed many icebergs on the 10th, and in the evening we tacked from a level field of ice, which extended northward as far as the eye could reach. Our leak remained in the same state; the pumps discharged in three minutes the quantity of water which had been received in fifteen.

The ship could not be got near to the land before the afternoon of the 11th. At four P.M. we hove to, opposite to, and about five miles distant from, the spot on which we had first struck on Saturday. Every glass was directed along the shore (as they had been throughout the day) to discover any trace of our absent consort; but, as none was seen, our solicitude respecting her was much increased, and we feared the crew might be wrecked on this

inhospitable shore. Guns were frequently fired to apprise any who might be near of our approach; but, as no one appeared, and no signal was returned, and the loose ice was setting down towards the ship, we bore up to proceed to the next appointed rendezvous. At eight P.M. we were abreast of the S.W. end of the island called Cape Resolution, which is a low point, but indicated at a distance by a lofty round-backed hill that rises above it. We entered Hudson's Straits soon afterwards.

The coast of Resolution Island should be approached with caution, as the tides appear to be strong and uncertain in their course. Some dangerous rocks lie above and below the water's edge, at the distance of five or six miles from East Bluff, bearing S. 32° E.

August 12.—Having had a fresh gale through the night, we reached Saddleback Island by noon (the place of rendezvous) and looked anxiously, but in vain, for the Wear. Several guns were fired, supposing she might be hid from our view by the land;

but, as she did not appear, Captain Davidson, having remained two hours, deemed further delay inexpedient, and bore up to keep the advantage of the fair wind. The outline of this island is rugged; the hummock on its northern extremity appeared to me to resemble a decayed martello tower more than a saddle.

Azimuths were obtained this evening that gave the variation $58^{\circ} 45' W.$, which is greater than is laid down in the charts, or than the officers of the Hudson's Bay ships have been accustomed to allow. We arrived abreast of the Upper Savage Island early in the morning, and as the breeze was moderate, the ship was steered as near to the shore as the wind would permit, to give the Esquimaux inhabitants an opportunity of coming off to barter, which they soon embraced.

Their shouts at a distance intimated their approach sometime before we descried the canoes paddling towards us; the headmost of them reached us at eleven; these were quickly followed by others, and before noon

about forty canoes, each holding one man, were assembled round the two ships. In the afternoon, when we approached nearer to the shore, five or six larger ones, containing the women and children, came up.

The Esquimaux immediately evinced their desire to barter, and displayed no small cunning in making their bargains, taking care not to exhibit too many articles at first. Their principal commodities were oil, sea-horse teeth, whale-bone, seal-skin dresses, caps and boots, deer-skins and horns, and models of their canoes; and they received in exchange small saws, knives, nails, tin-kettles, and needles. It was pleasing to behold the exultation, and to hear the shouts of the whole party, when an acquisition was made by any one; and not a little ludicrous to behold the eagerness with which the fortunate person licked each article with his tongue, on receiving it, as a finish to the bargain, and an act of appropriation. They in no instance omitted this strange practice, however small the article; the needles even passed individu-

ally through the ceremony. The women brought imitations of men, women, animals, and birds, carved with labour and ingenuity out of sea-horse teeth. The dresses and figures of the animals were not badly executed, but there was no attempt at the delineation of the countenances; and most of the figures were without eyes, ears, and fingers, the execution of which would, perhaps, have required more delicate instruments than they possess. The men set most value on saws; *kuttee-swa-bak*, the name by which they distinguish them, was a constant cry. Knives were held next in estimation. An old sword was bartered from the Eddystone, and I shall long remember the universal burst of joy on the happy man's receiving it. It was delightful to witness the general interest excited by individual acquisitions. There was no desire shown by any one to over-reach his neighbour, or to press towards any part of the ship where a bargain was making, until the person in possession of the place had completed his exchange and removed; and,

if any article happened to be demanded from the outer canoes, the men nearest assisted willingly in passing the thing across. Supposing the party to belong to one tribe, the total number of the tribe must exceed two hundred persons, as there were, probably, one hundred and fifty around the ships, and few of these were elderly persons or male children.

Their faces were broad and flat, the eyes small. The men were in general stout. Some of the younger women and the children had rather pleasing countenances, but the difference between these and the more aged of that sex bore strong testimony to the effects which a few years produce in this ungenial climate. Most of the party had sore eyes, all of them appeared of a plethoric habit of body; several were observed bleeding at the nose during their stay near the ship. The men's dresses consisted of a jacket of seal-skin, the trousers of bear-skin, and several had caps of the white fox-skin. The female dresses were made of the same materials, but dif-

ferently shaped, having a hood in which the infants were carried. We thought their manner very lively and agreeable. They were fond of mimicking our speech and gestures; but nothing afforded them greater amusement than when we attempted to retaliate by pronouncing any of their words.

The canoes were of seal-skin, and similar in every respect to those used by the Esquimaux in Greenland; they were generally new and very complete in their appointments. Those appropriated to the women are of ruder construction, and only calculated for fine weather; they are, however, useful vessels, being capable of containing twenty persons with their luggage. An elderly man officiates as steersman, and the women paddle, but they have also a mast which carries a sail, made of dressed whale-gut.

When the women had disposed of all their articles of trade they resorted to entreaty; and the putting in practice many enticing gestures was managed with so much address, as to procure them presents

of a variety of beads, needles, and other articles in great demand among females.

It is probable these Esquimaux go from this shore to some part of Labrador to pass the winter, as parties of them have been frequently seen by the homeward-bound Hudson's Bay ships in the act of crossing the Strait.

They appear to speak the same language as the tribe of Esquimaux who reside near to the Moravian settlements in Labrador; for we perceived they used several of the words which had been given to us by the Missionaries at Stromness.

Towards evening, the captain, being desirous to get rid of his visitors, took an effectual method by tacking from the shore; our friends then departed, apparently in high glæe at the harvest they had reaped. They paddled away very swiftly, and would doubtless soon reach the shore, though it was distant ten or twelve miles.

Not having encountered any of the ice, which usually arrests the progress of ships in their outward passage through the Straits,

and being consequently deprived of the usual means of replenishing our stock of water, which had become short, the captain resolved on going to the coast of Labrador for a supply. Dr. Richardson and I gladly embraced this opportunity to land and examine this part of the coast. I was also desirous to observe the variation on shore, as the azimuths, which had been taken on board both ships since our entrance into the Straits, had shown a greater amount than we had been led to expect; but unluckily the sun became obscured. The beach consisted of large rolled stones of gneiss and sienite, amongst which many pieces of ice had grounded, and it was with difficulty that we effected a landing in a small cove under a steep cliff. These stones were worn perfectly smooth; neither in the interstices, nor at the bottom of the water, which was very clear, were there any vestiges of sea-weed.

The cliff was from forty to fifty feet high and quite perpendicular, and had at its base a small slip of soil formed of the debris of

a bed of clay-slate. From this narrow spot Dr. Richardson collected specimens of thirty different species of plants; and we were about to scramble up a shelving part of the rock, and go into the interior, when we perceived the signal of recall, which the master had caused to be made, in consequence of a sudden change in the appearance of the weather.

On the evening of the 19th, we passed Digge's Islands, the termination of Hudson's Strait. Here the Eddystone parted company, being bound to Moose Factory at the bottom of the bay. A strong north wind came on, which prevented our getting round the north end of Mansfield; and, as it continued to blow with equal strength for the next five days, we were most vexatiously detained in beating along the Labrador coast, and near the dangerous chain of islands, the Sleepers, which are said to extend from the latitude of $60^{\circ} 10'$ to $57^{\circ} 00' N$. The press of sail, which of necessity we carried, caused the leak to in-

crease and the pumps were kept in constant use.

A favouring wind at length enabled us, on the 25th, to shape our course across Hudson's Bay. Nothing worthy of remark occurred during this passage, except the rapid decrease in the variation of the magnetic needle. The few remarks respecting the appearance of the land, which we were able to make in our quick passage through these Straits, were transmitted to the Admiralty; but as they will not be interesting to the general reader, and may not be sufficiently accurate for the guidance of the navigator, they are omitted in this narrative.

On the 28th we discovered the land to the southward of Cape Tatnam, which is so extremely low, that the tops of the trees were first discerned; the soundings at the time were seventeen fathoms, which gradually decreased to five as the shore was approached. Cape Tatnam is not otherwise remarkable than as being the point from

which the coast inclines rather more to the westward towards York Factory.

The opening of the morning of the 30th presented to our view the anchorage at York Flats, and the gratifying sight of a vessel at anchor, which we recognised, after an anxious examination, to be the Wear. A strong breeze blowing from the direction of the Flats, caused the water to be more shallow than usual on the sandy bar, which lies on the seaward side of the anchorage, and we could not get over it before two P.M., when the tide was nearly at its height.

Immediately after our arrival, Mr. Williams, the governor of the Hudson's Bay Company's post, came on board, accompanied by the commander of the Wear. The pleasure we felt in welcoming the latter gentleman can easily be imagined, when it is considered what reason we had to apprehend that he and his crew had been numbered with the dead. We learned that one of the larger masses of ice had providenti-

ally drifted between the vessel's side and the rocks just at the time he expected to strike, to which he secured it until a breeze sprang up and enabled him to pursue his voyage.

The governor acquainted me that he had received information from the committee of the Hudson's Bay Company of the equipment of the expedition, and that the officers would come out in their first ship. In the evening Dr. Richardson, Mr. Hood, and I, accompanied him to York Factory, which we reached after dark; it is distant from the Flats seven miles. Early next morning the honour of a salute was conferred on the members of the expedition.

Having communicated to the governor the objects of the expedition, and that I had been directed to consult with him and the senior servants of the Company as to the best mode of proceeding towards the execution of the service, I was gratified by his assurance that his instructions from the committee directed that every possible assistance should be given to forward our

progress, and that he should feel peculiar pleasure in performing this part of his duty. He introduced me at once to Messrs. Charles, Swaine, and Snodie, masters of districts, who, from long residence in the country, were perfectly acquainted with the different modes of travelling, and the obstructions which might be anticipated. At the desire of these gentlemen, I drew up a series of questions respecting the points on which we required information; to which, two days afterwards, they had the kindness to return very explicit and satisfactory answers; and on receiving them I requested the governor to favour me with his sentiments on the same subject in writing, which he delivered to me on the following day.

Having learned that Messrs. Shaw, M'Tavish, and several other partners of the N.W. Company, were under detention at this place, we took the earliest opportunity of visiting them; when having presented the general circular, and other introductory letters, with which I had been furnished by their agent, Mr. Simon M'Gillivray, we re-

ceived from them the most friendly and full assurance of the cordial endeavours of the wintering partners of their company to promote the interests of the expedition. The knowledge we had now gained of the state of the violent commercial opposition existing in the country rendered this assurance highly gratifying; and these gentlemen added to the obligation by freely communicating that information respecting the interior of the country, which their intelligence and long residence so fully qualified them to give.

I deemed it expedient to issue a memorandum to the officers of the expedition, strictly prohibiting any interference whatever in the existing quarrels, or any that might arise, between the two Companies; and on presenting it to the principals of both the parties, they expressed their satisfaction at the step I had taken.

The opinions of all the gentlemen were so decidedly in favour of the route by Cumberland House, and through the chain of posts to the Great Slave Lake, that I

determined on pursuing it, and immediately communicated my intention to the governor, with a request that he would furnish me with the means of conveyance for the party as speedily as possible.

It was suggested in my instructions that we might probably secure a schooner at this place, to proceed north as far as Wager Bay; but the vessel alluded to was lying at Moose Factory completely out of repair; independently of which, the route directly to the northward was rendered impracticable by the impossibility of procuring hunters and guides on the coast.

I found that as the Esquimaux inhabitants had left Churchill a month previous to our arrival, no interpreter from that quarter could be procured before their return in the following spring. The governor, however, undertook to forward to us, next season, the only one amongst them who understood English, if he could be induced to go.

The governor selected one of the largest of the Company's boats for our use on the

journey, and directed the carpenters to commence refitting it immediately; but he was only able to furnish us with a steersman, and we were obliged to make up the rest of the crew with the boatmen brought from Stromness, and our two attendants.

York Factory, the principal depôt of the Hudson's Bay Company, stands on the west bank of Hayes' River, about five miles above its mouth, on the marshy peninsula which separates the Hayes and Nelson Rivers. The surrounding country is flat and swampy, and covered with willows, poplars, larch, spruce, and birch-trees; but the requisition for fuel has expended all the wood in the vicinity of the fort, and the residents have now to send for it to a considerable distance. The soil is alluvial clay, and contains imbedded rolled stones. Though the bank of the river is elevated about twenty feet, it is frequently overflowed by the spring-floods, and large portions are annually carried away by the disruption of the ice, which, grounding in the stream, have formed several muddy islands. These

interruptions, together with the various collections of stones that are hid at high water, render the navigation of the river difficult; but vessels of two hundred tons burthen may be brought through the proper channels as high as the Factory.

The principal buildings are placed in the form of a square, having an octagonal court in the centre; they are two stories in height, and have flat roofs covered with lead. The officers dwell in one portion of this square, and in the other parts the articles of merchandise are kept; the workshops, store-houses for the furs, and the servants' houses are ranged on the outside of the square, and the whole is surrounded by a stockade twenty feet high. A platform is laid from the house to the pier on the bank for the convenience of transporting the stores and furs, which is the only promenade the residents have on this marshy spot during the summer season. The few Indians who now frequent this establishment belong to the *Swampy Crees*. There were several of them encamped on the outside of the stockade.

Their tents were rudely constructed by tying twenty or thirty poles together at the top, and spreading them out at the base so as to form a cone; these were covered with dressed moose-skins. The fire is placed in the centre, and a hole is left for the escape of the smoke. The inmates had a squalid look, and were suffering under the combined afflictions of hooping-cough and measles; but even these miseries did not keep them from an excessive indulgence in spirits, which they unhappily can procure from the traders with too much facility; and they nightly serenaded us with their monotonous drunken songs. Their sickness at this time was particularly felt by the traders, this being the season of the year when the exertion of every hunter is required to procure their winter's stock of geese, which resort in immense flocks to the extensive flats in this neighbourhood. These birds, during the summer, retire far to the north, and breed in security; but, when the approach of winter compels them to seek a more southern climate, they generally alight

on the marshes of this bay, and fatten there for three weeks or a month, before they take their final departure from the country. They also make a short halt at the same spots in their progress northwards in the spring. Their arrival is welcomed with joy, and the *goose hunt* is one of the most plentiful seasons of the year. The ducks frequent the swamps all the summer.

The weather was extremely unfavourable for celestial observations during our stay, and it was only by watching the momentary appearances of the sun, that we were enabled to obtain fresh rates for the chronometers, and allow for their errors from Greenwich time. The dip of the needle was observed to be $79^{\circ} 29' 07''$, and the difference produced by reversing the face of the instrument was $11^{\circ} 3' 40''$. A succession of fresh breezes prevented our ascertaining the intensity of the magnetic force. The position of York Factory, by our observations, is in latitude $57^{\circ} 00' 03''$ N., longitude $92^{\circ} 26' W.$ The variation of the compass $6^{\circ} 00' 21'' E.$

CHAPTER II.

Passage up Hayes', Steel, and Hill Rivers—Cross Swampy Lake—Jack River—Knee Lake and Magnetic Islet—Trout River—Holy Lake—Weepinapannis River—Windy Lake—White-Fall Lake and River—Echemamis and Sea Rivers—Play-Green Lakes—Lake Winnipeg—River Saskatchewan—Cross, Cedar, and Pine-Island Lakes—Cumberland House.

ON the 9th of September, our boat being completed, arrangements were made for our departure as soon as the tide should serve; but, when the stores were brought down to the beach, it was found that the boat would not contain them all; the whole, therefore, of the bacon, and part of the flour, rice, tobacco, and ammunition, were returned into the store. The bacon was too bulky an article to be forwarded under any circumstances; but the governor undertook to forward the rest next season.

In making the selection of articles to carry with us, I was guided by the judgment of Governor Williams, who assured me that tobacco, ammunition, and spirits, could be procured in the interior, otherwise I should have been very unwilling to have left these essential articles behind. We embarked at noon, and were honoured with a salute of eight guns and three cheers from the governor and all the inmates of the fort, who had assembled to witness our departure. We gratefully returned their cheers, and then made sail, much delighted at having now commenced our voyage into the interior of America. The wind and tide failing us at the distance of six miles above the Factory, and the current being too rapid for using oars to advantage; the crew had to commence tracking, or dragging the boat by a line, to which they were harnessed. This operation is extremely laborious in these rivers. Our men were obliged to walk along the steep declivity of a high bank, rendered at this season soft and slippery by frequent rains, and their progress

was often further impeded by fallen trees, which, having slipped from the verge of the thick wood above, hung on the face of the bank in a great variety of directions. Notwithstanding these obstacles, we advanced at the rate of two miles an hour, one half of the crew relieving the other at intervals of an hour and a half. The banks of the river, and its islands, composed of alluvial soil, are well covered with pines, larches, poplars, and willows. The breadth of the stream, some distance above the Factory, is about half a mile, and its depth, during this day's voyage, varied from three to nine feet.

At sunset we landed, and pitched the tent for the night, having made a progress of twelve miles. A large fire was quickly kindled, supper speedily prepared, and as readily despatched, when we retired with our buffalo robes on, and enjoyed a night of sound repose.

It may here be stated, that the survey of the river was made by taking the bearings of every point with a pocket compass, esti-

mating the distances, and making a connected eye-sketch of the whole. This part of the survey was allotted to Messrs. Back and Hood conjointly: Mr. Hood also protracted the route every evening on a ruled map, after the courses and distances had been corrected by observations for latitude and longitude, taken by myself as often as the weather would allow. The extraordinary talent of this young officer in this line of service proved of the greatest advantage to the expedition, and he continued to perform that duty until his lamented death, with a degree of zeal and accuracy that characterized all his pursuits.

The next morning our camp was in motion at five A.M., and we soon afterwards embarked with the flattering accompaniment of a fair wind; it proved, however, too light to enable us to stem the stream, and we were obliged to resume the fatiguing operation of tracking; sometimes under cliffs so steep that the men could scarcely find a footing, and not unfrequently over spots rendered so miry by the small streams

that trickled from above, as to be almost impassable. In the course of the day we passed the scene of a very melancholy accident. Some years ago, two families of Indians, induced by the flatness of a small beach, which lay betwixt the cliff and the river, chose it as the site of their encampment. They retired quietly to rest, not aware that the precipice, detached from the bank, and urged by an accumulation of water in the crevice behind, was tottering to its base. It fell during the night and the whole party was buried under its ruins.

The length of our voyage to-day was, in a direct line, sixteen miles and a quarter, on a S.S.W. course. We encamped soon after sunset, and the tent was scarcely pitched when a heavy rain began, which continued all night.

Sixteen miles on the 11th, and five on the following morning, brought us to the commencement of Hayes' River, which is formed by the confluence of the Shamattawa and Steel Rivers. Our observations place this spot in latitude $56^{\circ} 22' 32''$ N., longi-

tude $93^{\circ} 1' 37''$ W. It is forty-eight miles and a half from York Factory, including the windings of the river. Steel River, through which our course lay, is about three hundred yards wide at its mouth; its banks have more elevation than those of Hayes' River, but they shelve more gradually down to the stream, and afford a tolerably good towing path, which compensates, in some degree, for the rapids and frequent shoals that impede its navigation. We succeeded in getting about ten miles above the mouth of the river, before the close of day compelled us to disembark.

We made an effort, on the morning of the 13th, to stem the current under sail, but as the course of the river was very serpentine, we found that greater progress could be made by tracking. Steel River presents much beautiful scenery; it winds through a narrow, but well wooded, valley, which at every turn disclosed to us an agreeable variety of prospect, rendered more picturesque by the effect of the season on the foliage, now ready to drop from the trees. The

light yellow of the fading poplars formed a fine contrast to the dark evergreen of the spruce, whilst the willows of an intermediate hue served to shade the two principal masses of colour into each other. The scene was occasionally enlivened by the bright purple tints of the dogwood, blended with the browner shades of the dwarf birch, and frequently intermixed with the gay yellow flowers of the shrubby cinquefoil. With all these charms, the scene appeared desolate from want of the human species. The stillness was so great, that even the twittering of the *whiskey-johneesh*, or cinereous crow, caused us to start. Our voyage to-day was sixteen miles on a S.W. course.

Sept. 14.—We had much rain during the night, and also in the morning, which detained us in our encampment later than usual. We set out as soon as the weather cleared up, and in a short time arrived at the head of Steel River, where it is formed by the junction of Fox and Hill Rivers. These two rivers are nearly of equal width,

but the latter is the most rapid. Mr. M'Donald, on his way to Red River, in a small canoe, manned by two Indians, overtook us at this place. It may be mentioned as a proof of the dexterity of the Indians, and the skill with which they steel upon their game, that they had on the preceding day, with no other arms than a hatchet, killed two deer, a hawk, a curlew, and a sturgeon. Three of the Company's boats joined us in the course of the morning, and we pursued our course up Hill River in company. The water in this river was so low, and the rapids so bad, that we were obliged several times, in the course of the day, to jump into the water, and assist in lifting the boat over the large stones which impeded the navigation. The length of our voyage to-day was only six miles and three quarters.

The four boats commenced operations together at five o'clock the following morning; but our boat being overladen, we soon found that we were unable to keep pace with the others, and, therefore, proposed

to the gentlemen in charge of the Company's boats, that they should relieve us of part of our cargo. This they declined doing, under the plea of not having received orders to that effect, notwithstanding that the circular, with which I was furnished by Governor Williams, strictly enjoined all the Company's servants to afford us every assistance. In consequence of this refusal we dropt behind, and our steersman, who was inexperienced, being thus deprived of the advantage of observing the route followed by the guide, who was in the foremost boat, frequently took a wrong channel. The tow-line broke twice, and the boat was only prevented from going broadside down the stream, and breaking to pieces against the stones, by the officers and men leaping into the water, and holding her head to the current until the line could be carried again to the shore. It is but justice to say, that in these trying situations we received much assistance from Mr. Thomas Swaine, who with great kindness waited for us with the boat under his charge at such places as he

apprehended would be most difficult to pass. We encamped at sunset completely jaded with toil. Our distance made good this day was twelve miles and a quarter.

The labours of the 16th commenced at half-past five, and for some time the difficulty of getting the boats over the rapids was equal to what we experienced the day before. Having passed a small brook, however, termed *Half-way Creek*, the river became deeper, and although rapid, it was smooth enough to be named by our Orkney boatmen *Still-water*. We were further relieved by the Company's clerks consenting to take a few boxes of our stores into their boats. Still we made only eleven miles in the course of the day.

The banks of Hill River are higher, and have a more broken outline, than those of Steel or Hayes' Rivers. The cliffs of alluvial clay rose in some places to the height of eighty or ninety feet above the stream, and were surmounted by hills about two hundred feet high, but the thickness of the

wood prevented us from seeing far beyond the mere banks of the river.

September 17.—About half-past five in the morning we commenced tracking, and soon came to a ridge of rock which extended across the stream. From this place the boat was dragged up several narrow rocky channels, until we came to the Rock Portage, where the stream, pent in by a range of small islands, forms several cascades. In ascending the river, the boats with their cargoes are carried over one of the islands, but in the descent they are shot down the most shelving of the cascades. Having performed the operations of carrying, launching, and restowing the cargo, we plied the oars for a short distance, and landed at a dépôt called Rock House. Here we were informed that the rapids in the upper parts of Hill River were much worse and more numerous than those we had passed, particularly in the present season, owing to the unusual lowness of the water. This intelligence was very mortifying, especially as the gentlemen in charge

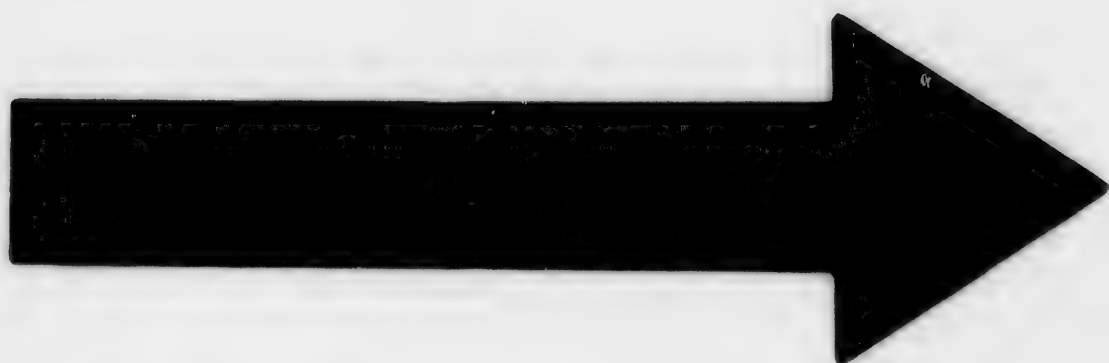
of the Company's boats declared that they were unable to carry any part of our stores beyond this place; and the traders, guides, and most experienced of the boatmen, were of opinion, that unless our boat was still further lightened, the winter would put a stop to our progress before we could reach Cumberland House, or any eligible post. Sixteen pieces were therefore necessarily left with Mr. Bunn, the gentleman in charge of the post, to be forwarded by the Athabasca canoes next season, this being their place of rendezvous.

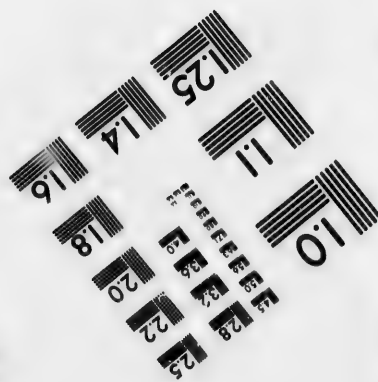
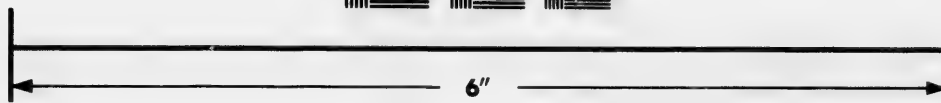
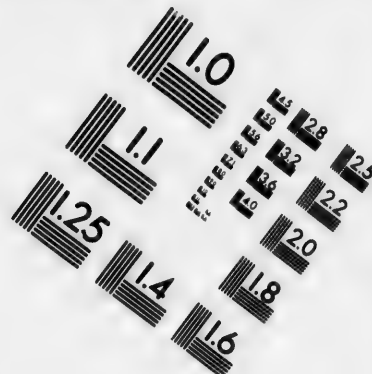
After this we recommenced our voyage, and having pulled nearly a mile, arrived at Borrowick's Fall, where the boat was dragged up with a line, after part of the cargo had been carried over a small portage. From this place to the Mud Portage, a distance of a mile and three-quarters, the boats were pushed on with poles against a very rapid stream. Here we encamped, having come seven miles during the day on a S.W. course. We had several snow

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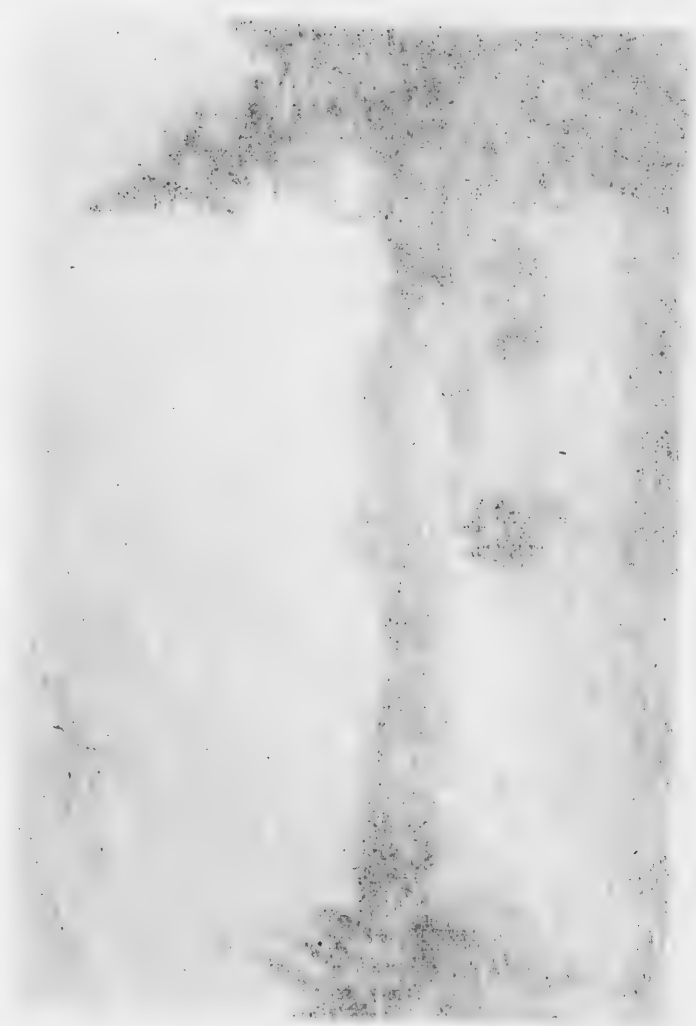




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showers in the course of the day, and the thermometer at bed-time stood at 30°.

On the morning of the 18th, the country was clothed in the livery of winter, a heavy fall of snow having taken place during the night. We embarked at the usual hour, and in the course of the day crossed the Point of Rocks and Brassa Portages, and dragged the boats through several minor rapids. In this tedious way we only made good about nine miles.

On Sunday the 19th we hauled the boats up several short rapids, or, as the boatmen term them, expressively enough, *spouts*, and carried them over the Portages of Lower Burntwood and Morgan's Rocks; on the latter of which we encamped, having proceeded, during the whole day, only one mile and three-quarters.

The upper part of Hill River swells out considerably, and at Morgan's Rocks, where it is three-quarters of a mile wide, we were gratified with a more extensive prospect of the country than any we had enjoyed since leaving York Factory. The banks of the

river here, consisting of low flat rocks with intermediate swamps, permitted us to obtain views of the interior, the surface of which is broken into a multitude of cone-shaped hills. The highest of these hills, which gives a name to the river, has an elevation not exceeding six hundred feet. From its summit, thirty-six lakes are said to be visible. The beauty of the scenery, dressed in the tints of autumn, called forth our admiration, and was the subject of Mr. Hood's accurate pencil. On the 20th we passed Upper Burntwood and Rocky Ledge Portages, besides several strong *spouts*, and in the evening arrived at Smooth Rock Portage, where we encamped, having come three miles and a half. It is not easy for any but an eye-witness to form an adequate idea of the exertions of the Orkney boatmen in the navigation of this river. The necessity they are under of frequently jumping into the water to lift the boats over the rocks, compels them to remain the whole day in wet clothes, at a season when the temperature is far below the freezing

point. The immense loads too, which they carry over the portages, is not more a matter of surprise than the alacrity with which they perform these laborious duties.

At six on the morning of the 21st, we left our encampment, and soon after arrived at the Mossy Portage, where the cargoes were carried through a deep bog for a quarter of a mile. The river swells out, above this portage, to the breadth of several miles, and as the islands are numerous there are a great variety of channels. Night overtook us before we arrived at the *Second Portage*, so named from its being the second in the passage down the river. Our whole distance this day was one mile and a quarter.

On the 22d our route led us amongst many wooded islands, which, lying in long vistas, produced scenes of much beauty. In the course of the day we crossed the Upper Portage, surmounted the Devil's Landing Place, and urged the boat with poles through Groundwater Creek. At the upper end of this creek, our bowman having given the boat too great a sheer, to avoid

the rock, it was caught on the broadside by the current, and, in defiance of our utmost exertions, hurried down the rapid. Fortunately, however, it grounded against a rock high enough to prevent the current from oversetting it, and the crews of the other boats having come to our assistance, we succeeded, after several trials, in throwing a rope to them, with which they dragged our almost sinking vessel stern foremost up the stream, and rescued us from our perilous situation. We encamped in the dusk of the evening amidst a heavy thunderstorm, having advanced two miles and three-quarters.

About ten in the morning of the 23d we arrived at the *Dramstone*, which is hailed with pleasure by the boats' crews, as marking the termination of the laborious ascent of Hill River. We complied with the custom from whence it derives its name, and soon after landing upon Sail Island prepared breakfast. In the mean time our boatmen cut down and rigged a new mast, the old one having been thrown overboard at the

mouth of Steel River, where it ceased to be useful. We left Sail Island with a fair wind, and soon afterwards arrived at a depôt situated on Swampy Lake, where we received a supply of mouldy *pemmican*.* Mr. Calder and his attendant were the only tenants of this cheerless abode, and their only food was the wretched stuff with which they supplied us, the lake not yielding fish at this season. After a short delay at this post, we sailed through the remainder of Swampy Lake, and slept at the Lower Portage in Jack River, the distance sailed to-day being sixteen miles and a half.

Jack River is only eight miles long; but being full of bad rapids, it detained us considerably. At seven in the morning of the 24th, we crossed the Long Portage, where the woods, having caught fire in the summer, were still smoking. This is a common accident, owing to the neglect of the Indians and voyagers in not putting out

* Buffalo meat, dried and pounded, and mixed with melted fat.

their fires, and in a dry season the woods may be seen blazing to the extent of many miles. We afterwards crossed the Second, or Swampy Portage, and in the evening encamped on the Upper Portage, where we were overtaken by an Indian bringing an answer from Governor Williams to a letter I had written to him on the 15th, in which he renewed his injunctions to the gentlemen of the boats accompanying us, to afford us every assistance in their power. The *Aurora Borealis* appeared this evening in form of a bright arch, extending across the zenith in a N.W. and S.E. direction. The extent of our voyage to-day was two miles.

About noon, on the 25th, we entered Knee Lake, which has a very irregular form, and near its middle takes a sudden turn, from whence it derives its name. It is thickly studded with islands, and its shores are low and well-wooded. The surrounding country, as far as we could see, is flat, being destitute even of the moderate elevations which occur near the upper part of Hill River. The weather was remark-

ably fine, and the setting sun threw the richest tints over the scene that I remember ever to have witnessed.

About half a mile from the bend or *knee* of the lake, there is a small rocky islet, composed of magnetic iron ore, which affects the magnetic needle at a considerable distance. Having received previous information respecting this circumstance, we watched our compasses carefully, and perceived that they were affected at the distance of three hundred yards, both on the approach to and departure from the rock: on decreasing the distance, they became gradually more and more unsteady, and on landing they were rendered quite useless; and it was evident that the general magnetic influence was totally overpowered by the local attraction of the ore. When Kater's compass was held near to the ground on the N.W. side of the island, the needle dipped so much that the card could not be made to traverse by any adjustment of the hand; but on moving the same compass about thirty yards to the

west part of the islet, the needle became horizontal, traversed freely, and pointed to the magnetic north. The dipping needle being landed on the S.W. point of the islet, was adjusted as nearly as possible on the magnetic meridian by the sun's bearings, and found to vibrate freely, when the face of the instrument was directed to the east or west. The mean dip it gave was $80^{\circ} 37' 50''$. When the instrument was removed from the N.W. to the S.E. point, about twenty yards distant, and placed on the meridian, the needle ceased to traverse, but remained steady at an angle of 60° . On changing the face of the instrument, so as to give a S.E. and N.W. direction to the needle, it hung vertically. The position of the slaty strata of the magnetic ore is also vertical. Their direction is extremely irregular, being much contorted.

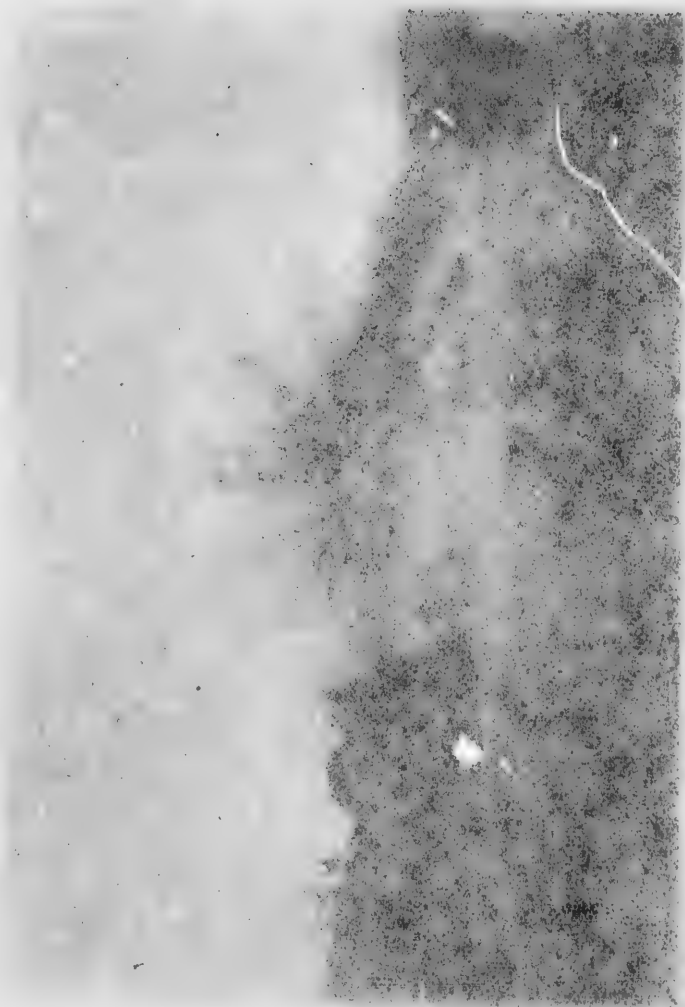
Knee Lake towards its upper end becomes narrower, and its rocky shores are broken into conical and rounded eminences, destitute of soil, and of course devoid of trees. We slept at the western extremity

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the other side of the house, there are two smaller rooms, and a bath room. The large bedroom, 14 foot by 10, is the main room of the place, and is the only room with three pictures and a fireplace. The rest of these rooms are very small, and contain very little furniture, and it is necessary to look up the very simple furniture in the other rooms, as in the front



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of the lake, having come during the day nineteen miles and a half on a S.W. course.

We began the ascent of Trout River early in the morning of the 27th, and in the course of the day passed three portages and several rapids. At the first of these portages the river falls between two rocks about sixteen feet, and it is necessary to launch the boat over a precipitous rocky bank. This cascade is named the *Trout-Fall*, and the beauty of the scenery afforded a subject for Mr. Hood's pencil. The rocks which form the bed of this river are slaty, and present sharp fragments, by which the feet of the boatmen are much lacerated. The Second Portage, in particular, obtains the expressive name of *Knife Portage*. The length of our voyage to-day was three miles.

On the 28th we passed through the remainder of Trout River, and, at noon, arrived at Oxford House, on Holey Lake. This was formerly a post of some consequence to the Hudson's Bay Company, but at present it exhibits unequivocal signs of

decay. The Indians have of late years been gradually deserting the low or swampy country, and ascending the Saskatchewan, where animals are more abundant. A few Crees were at this time encamped in front of the fort. They were suffering under hooping-cough and measles, and looked miserably dejected. We endeavoured in vain to prevail on one of them to accompany us for the purpose of killing ducks, which were numerous, but too shy for our sportsmen. We had the satisfaction, however, of exchanging the mouldy pemmican, obtained at Swampy Lake, for a better kind, and received, moreover, a small, but very acceptable supply of fish. Holey Lake, viewed from an eminence behind Oxford House, exhibits a pleasing prospect; and its numerous islands, varying much in shape and elevation, contribute to break that uniformity of scenery which proves so palling to a traveller in this country. Trout of a great size, frequently exceeding forty pounds weight, abound in this lake. We left Oxford House in the

afternoon, and encamped on an island about eight miles distant, having come, during the day, nine miles and a quarter.

At noon, on the 29th, after passing through the remainder of Holey Lake, we entered the Weepinapannis, a narrow grassy river, which runs parallel to the lake for a considerable distance, and forms its south bank into a narrow peninsula. In the morning we arrived at the Swampy Portage, where two of the boats were broken against the rocks. The length of the day's voyage was nineteen miles and a half.

In consequence of the accident yesterday evening, we were detained a considerable time this morning, until the boats were repaired, when we set out, and, after ascending a strong rapid, arrived at the portage by John Moore's Island. Here the river rushes with irresistible force through the channels formed by two rocky islands; and we learned, that last year a poor man, in hauling a boat up one of these channels, was, by the breaking of the line, precipitated into

the stream, and hurried down the cascade with such rapidity, that all efforts to save him were ineffectual. His body was afterwards found, and interred near the spot.

The Weepinapannis is composed of several branches which separate and unite again and again, intersecting the country in a great variety of directions. We pursued the principal channel, and having passed the Crooked Spout, with several inferior rapids, and crossed a small piece of water, named Windy Lake, we entered a smooth deep stream, about three hundred yards wide, which has got the absurd appellation of the Rabbit Ground. The marshy banks of this river are skirted by low barren rocks, behind which there are some groups of stunted trees. As we advanced, the country becoming flatter, gradually opened to our view, and we at length arrived at a shallow, reedy lake, the direct course through which leads to the Hill Portage. This route has, however, of late years been disused, and we therefore turned towards the north, and

crossing a small arm of the lake, arrived at Hill Gates by sunset, having come this day eleven miles.

October 1.—Hill Gates is the name imposed upon a romantic defile, whose rocky walls, rising perpendicularly to the height of sixty or eighty feet, hem in the stream for three quarters of a mile, in many places so narrowly, that there is a want of room to ply the oars. In passing through this chasm we were naturally led to contemplate the mighty but, probably, slow and gradual effects of the water in wearing down such immense masses of rock; but in the midst of our speculations, the attention was excited anew to a grand and picturesque rapid, which, surrounded by the most wild and majestic scenery, terminated the defile. The brown fishing-eagle had built its nest on one of the projecting cliffs. In the course of the day we surmounted this and another dangerous portage, called the Upper and Lower Hill Gate Portages, crossed a small sheet of water, termed the White Fall Lake, and entering the river of the same

name, arrived at the White Fall about an hour after sunset, having come fourteen miles on a S.W. course.

The whole of the 2d of October was spent in carrying the cargoes over a portage of thirteen hundred yards in length, and in launching the empty boats over three several ridges of rock which obstruct the channel and produce as many cascades. I shall long remember the rude and characteristic wildness of the scenery which surrounded these falls; rocks piled on rocks hung in rude and shapeless masses over the agitated torrents which swept their bases, whilst the bright and variegated tints of the mosses and lichens, that covered the face of the cliffs, contrasting with the dark green of the pines which crowned their summits, added both beauty and grandeur to the scene. Our two companions, Back and Hood, made accurate sketches of these falls. At this place we observed a conspicuous *lop-stick*, a kind of land-mark, which I had not hitherto noticed, notwithstanding its great use in pointing out the frequented routes.

It is a pine-tree divested of its lower branches, and having only a small tuft at the top remaining. This operation is usually performed at the instance of some individual emulous of fame. He treats his companions with rum, and they in return strip the tree of its branches, and ever after designate it by his name.

In the afternoon, whilst on my way to superintend the operations of the men, a stratum of loose moss gave way under my feet, and I had the misfortune to slip from the summit of a rock into the river betwixt two of the falls. My attempts to regain the bank were, for a time, ineffectual, owing to the rocks within my reach having been worn smooth by the action of the water; but, after I had been carried a considerable distance down the stream, I caught hold of a willow, by which I held until two gentlemen of the Hudson's Bay Company came in a boat to my assistance. The only bad consequence of this accident was an injury sustained by a very valuable chronometer, (No. 1733,) belonging to Daniel Moore,

Esq., of Lincoln's Inn. One of the gentlemen to whom I delivered it immediately on landing, in his agitation let it fall, whereby the minute-hand was broken, but the works were not in the smallest degree injured, and the loss of the hand was afterwards supplied.

During the night the frost was severe; and at sunrise, on the 3d, the thermometer stood at 25° . After leaving our encampment at the White Fall, we passed through several small lakes, connected with each other by narrow, deep, grassy streams, and at noon arrived at the Painted Stone. Numbers of musk-rats frequent these streams; and we observed, in the course of the morning, many of their mud houses rising in a conical form to the height of two or three feet above the grass of the swamps in which they were built.

The Painted Stone is a low rock, ten or twelve yards across, remarkable for the marshy streams, which arise on each side of it, taking different courses. On the one side, the watery course which we had na-

vigated from York Factory commences. This spot may therefore be considered as one of the smaller sources of Hayes' River. On the other side of the stone the Echemamis rises, and taking a westerly direction falls into Nelson River. It is said that there was formerly a stone placed near the centre of this portage on which figures were annually traced, and offerings deposited, by the Indians; but the stone has been removed many years, and the spot has ceased to be held in veneration. Here we were overtaken by Governor Williams, who left York Factory on the 20th of last month in an Indian canoe. He expressed much regret at our having been obliged to leave part of our stores at the rock depôt, and would have brought them up with him had he been able to procure and man a boat, or a canoe of sufficient size.

Having launched the boats over the rock, we commenced the descent of the Echemamis. This small stream has its course through a morass, and in dry seasons its channel contains, instead of water, merely a

foot or two of thin mud. On these occasions it is customary to build dams that it may be rendered navigable by the accumulation of its waters. As the beavers perform this operation very effectually, endeavours have been made to encourage them to breed in this place, but it has not hitherto been possible to restrain the Indians from killing that useful animal whenever they discover its retreats. On the present occasion there was no want of water, the principal impediment we experienced being from the narrowness of the channel, which permitted the willows of each bank to meet over our heads, and obstruct the men at the oars. After proceeding down the stream for some time, we came to a recently-constructed beaver-dam, through which an opening was made sufficient to admit the boat to pass. We were assured that the breach would be closed by the industrious creature in a single night. We encamped about eight miles from the source of the river, having come during the day seventeen miles and a half.

On the 4th we embarked amidst a heavy rain, and pursued our route down the Echemamis. In many parts the morass, by which the river is nourished, and through which it flows, is intersected by ridges of rock which cross the channel, and require the boat to be lifted over them. In the afternoon we passed through a shallow piece of water overgrown with bulrushes, and hence named Hairy Lake; and in the evening encamped on the banks of Blackwater Creek, by which this lake empties itself into Sea River, having come during the day twenty miles and three quarters.

On the morning of the 5th, we entered Sea River, one of the many branches of Nelson River. It is about four hundred yards wide, and its waters are of a muddy white colour. After ascending the stream for an hour or two, and passing through Carpenter's Lake, which is merely an expansion of the river to about a mile in breadth, we came to the Sea River Portage, where the boat was launched across a smooth rock, to avoid a fall of four or five

feet. Re-embarking at the upper end of the Portage, we ran before a fresh gale through the remainder of Sea River, the lower part of Play Green Lake, and entering Little Jack River, landed and pitched our tents. Here there is a small log-hut, the residence of a fisherman, who supplies Norway House with trout and sturgeon. He gave us a few of these fish, which afforded an acceptable supper. Our voyage this day was thirty-four miles.

October 6.—Little Jack River is the name given to a channel that winds among several large islands which separate Upper and Lower Play Green Lakes. At the lower end of this channel, Big Jack River, a stream of considerable magnitude, falls into the lake. Play Green is a translation of the appellation given to that lake by two bands of Indians, who met and held a festival on an island situated near its centre. After leaving our encampment we sailed through Upper Play Green Lake, and arrived at Norway Point in the forenoon.

The waters of Lake Winnipeg, and of the

rivers that run into it, the Saskatchewan in particular, are rendered turbid by the suspension of a large quantity of white clay. Play Green Lake and Nelson River, being the discharges of the Winnipeg, are equally opaque, a circumstance that renders the sunken rocks, so frequent in these waters, very dangerous to boats in a fresh breeze. Owing to this, one of the boats that accompanied us, sailing at the rate of seven miles an hour, struck upon one of these rocks. Its mast was carried away by the shock, but fortunately no other damage sustained. The Indians ascribe the muddiness of these lakes to an adventure of one of their deities, a mischievous fellow, a sort Robin Puck, whom they hold in very little esteem. This deity, who is named Weesakootchaht, possesses considerable power, but makes a capricious use of it, and delights in tormenting the poor Indians. He is not, however, invincible, and was foiled in one of his attempts by the artifice of an old woman, who succeeded in taking him captive. She called in all the women of the tribe to aid

in his punishment, and he escaped from their hands in a condition so filthy that it required all the waters of the great lake to wash him clean; and ever since that period it has been entitled to the appellation of Winipeg, or Muddy Water.

Norway Point forms the extremity of a narrow peninsula which separates Play Green and Winipeg Lakes. Buildings were first erected here by a party of Norwegians, who were driven away from the colony at Red River by the commotions which took place some time ago. It is now a trading post belonging to the Hudson's Bay Company. On landing at Norway House we met with Lord Selkirk's colonists, who had started from York Factory the day before us. These poor people were exceedingly pleased at meeting with us again in this wild country; having accompanied them across the Atlantic, they viewed us in the light of old acquaintances. This post was under the charge of Mr. James Sutherland, to whom I am indebted for replacing a minute-hand on the chronometer, which was

broken at the White Fall, and I had afterwards the satisfaction of finding that it went with extraordinary regularity.

The morning of the 7th October was beautifully clear, and the observations we obtained place Norway House in latitude $53^{\circ} 41' 38''$ N., and longitude $98^{\circ} 1' 24''$ W.; the variation of the magnetic needle $14^{\circ} 12' 41''$ E., and its dip $83^{\circ} 40' 10''$. Though our route from York Factory has rather inclined to the S.W., the dip, it will be perceived, has gradually increased. The difference produced by reversing the face of the instrument was $7^{\circ} 39'$. There was too much wind to admit of our observing, with any degree of accuracy, the quantity of the magnetic force.

We left Norway House soon after noon, and the wind being favourable, sailed along the northern shore of Lake Winipeg the whole of the ensuing night; and on the morning of the 8th landed on a narrow ridge of sand, which, running out twenty miles to the westward, separates Limestone Bay from the body of the lake. When the wind

blows hard from the southward, it is customary to carry boats across this isthmus, and to pull up under its lee. From Norwegian Point to Limestone Bay the shore consists of high clay cliffs, against which the waves beat with violence during strong southerly winds. When the wind blows from the land, and the waters of the lake are low, a narrow sandy beach is uncovered, and affords a landing-place for boats. The shores of Limestone Bay are covered with small fragments of calcareous stones. During the night the Aurora Borealis was quick in its motions, and various and vivid in its colours. After breakfasting we re-embarked, and continued our voyage until three P.M., when a strong westerly wind arising, we were obliged to shelter ourselves on a small island, which lies near the extremity of the above-mentioned peninsula. This island is formed of a collection of small rolled pieces of limestone, and was remembered by some of our boatmen to have been formerly covered with water. For the last ten or twelve years the waters

of the lake have been low, but our information did not enable us to judge whether the decrease was merely casual, or going on continually, or periodical. The distance of this island from Norway house is thirty-eight miles and a half.

The westerly winds detained us all the morning of the 9th, but, at two P.M., the wind chopped round to the eastward; we immediately embarked, and the breeze afterwards freshening, we reached the mouth of the Saskatchewan at midnight, having run thirty-two miles.

Sunday, October 10.—The whole of this day was occupied in getting the boats from the mouth of the river to the foot of the Grand Rapid, a distance of two miles. There are several rapids in this short distance, during which the river varies its breadth from five hundred yards to half a mile. Its channel is stony. At the grand rapid the Saskatchewan forms a sudden bend, from south to east, and works its way through a narrow channel, deeply worn into the limestone strata. The stream, rushing with in-

petuous force over a rocky and uneven bottom, presents a sheet of foam, and seems to bear with impatience the straitened confinement of its lofty banks. A flock of pelicans, and two or three brown fishing eagles, were fishing in its agitated waters, seemingly with great success. There is a good sturgeon fishery at the foot of the rapid. Several golden plovers, Canadian gros-beaks, cross-bills, wood-peckers, and pin-tailed grouse, were shot to day; and Mr. Back killed a small striped marmot. This beautiful little animal was busily employed in carrying in its distended pouches the seeds of the American vetch to its winter hoards.

The portage is eighteen hundred yards long, and its western extremity was found to be in $53^{\circ} 08' 25''$ North latitude, and $99^{\circ} 28' 02''$ West longitude. The route from Canada to the Athabasca joins that from York Factory at the mouth of the Saskatchewan, and we saw traces of a recent encampment of the Canadian voyagers. Our companions in the Hudson's Bay boats,

dreading an attack from their rivals in trade, were on the alert at this place. They examined minutely the spot of encampment, to form a judgment of the number of canoes that had preceded them; and they advanced, armed, and with great caution, through the woods. Their fears, however, on this occasion, were fortunately groundless.

By noon, on the 12th, the boats and their cargoes having been conveyed across the portage, we embarked, and pursued our course. The Saskatchewan becomes wider above the Grand Rapid, and the scenery improves. The banks are high, composed of white clay and limestone, and their summits are richly clothed with a variety of firs, poplars, birches and willows. The current runs with great rapidity, and the channel is in many places intricate and dangerous, from broken ridges of rock jutting into the stream. We pitched our tents at the entrance of Cross Lake, having advanced only five miles and a half.

Cross Lake is extensive, running towards

the N.E. it is said, for forty miles. We crossed it at a narrow part, and pulling through several winding channels formed by a group of islands, entered Cedar Lake, which, next to Lake Winipeg, is the largest sheet of fresh water we had hitherto seen. Ducks and geese resort hither in immense flocks in the spring and autumn. These birds were now beginning to go off, owing to its muddy shores having become quite hard through the nightly frosts. At this place the Aurora Borealis was extremely brilliant in the night, its coruscations darting, at times, over the whole sky, and assuming various prismatic tints, of which the violet and yellow were predominant.

After pulling, on the 14th, seven miles and a quarter on the lake, a violent wind drove us for shelter to a small island, or rather a ridge of rolled stones, thrown up by the frequent storms which agitate this lake. The weather did not moderate the whole day, and we were obliged to pass the night on this exposed spot. The delay, however, enabled us to obtain some lunar

observations. The wind having subsided, we left our resting-place the following morning, crossed the remainder of the lake, and in the afternoon arrived at Muddy Lake, which is very appropriately named, as it consists merely of a few channels, winding amongst extensive mud banks, which are overflowed during the spring floods. We landed at an Indian tent, which contained two numerous families, amounting to thirty souls. These poor creatures were badly clothed, and reduced to a miserable condition by the hooping-cough and measles. At the time of our arrival they were busy in preparing a sweating-house for the sick. This is a remedy which they consider, with the addition of singing and drumming, to be the grand specific for all diseases. Our companions having obtained some geese, in exchange for rum and tobacco, we proceeded a few more miles, and encamped on Devil's Drum Island, having come during the day twenty miles and a half. A second party of Indians were encamped on an adjoining island,

a situation chosen for the purpose of killing geese and ducks.

On the 16th we proceeded eighteen miles up the Saskatchewan. Its banks are low, covered with willows, and lined with drift timber. The surrounding country is swampy and intersected by the numerous arms of the river. After passing for twenty or thirty yards through the willow thicket on the banks of the stream, we entered an extensive marsh, varied only by a distant line of willows, which marks the course of a creek, or branch of the river. The branch we navigated to-day, is almost five hundred yards wide. The exhalations from the marshy soil produced a low fog, although the sky above was perfectly clear. In the course of the day we passed an Indian encampment of three tents, whose inmates appeared to be in a still more miserable condition than those we saw yesterday. They had just finished the ceremony of conjuration over some of their sick companions; and a dog, which had been recently killed as a sacrifice to some deity, was hanging to

a tree, where it would be left (I was told) when they moved their encampment.

We continued our voyage up the river to the 20th with little variation of scenery or incident, travelling in that time about thirty miles. The near approach of winter was marked by severe frosts, which continued all day unless when the sun chanced to be unusually bright, and the geese and ducks were observed to take a southerly course in large flocks. On the morning of the 20th we came to a party of Indians, encamped behind the bank of the river on the borders of a small marshy lake, for the purpose of killing water-fowl. Here we were gratified with the view of a very large tent. Its length was about forty feet, its breadth eighteen, and its covering was moose-deer leather, with apertures for the escape of the smoke from the fires, which are placed at each end; a ledge of wood was placed on the ground on both sides the whole length of the tent, within which were the sleeping-places, arranged probably according to families; and the drums and other instru-

ments of enchantment were piled up in the centre. Amongst the Indians there were a great many half-breeds, who led an Indian life. Governor Williams gave a dram and a piece of tobacco to each of the males of the party.

On the morning of the 21st a heavy fall of snow took place, which lasted until two in the afternoon. In the evening we left the Saskatchewan, and entered the Little River, one of the two streams by which Pine Island Lake discharges its waters. We advanced to-day fourteen miles and a quarter. On the 22d the weather was extremely cold and stormy, and we had to contend against a strong head wind. The spray froze as it fell, and the oars were so loaded with ice as to be almost unmanageable. The length of our voyage this day was eleven miles.

The following morning was very cold; we embarked at day-light, and pulled across a part of Pine Island Lake, about three miles and a half, to Cumberland House. The margin of the lake was so incrustated with ice, that we had to break through a

considerable space of it to approach the landing-place. When we considered that this was the effect of only a few days' frost at the commencement of winter, we were convinced of the impracticability of advancing further by water this season, and therefore resolved on accepting Governor Williams's kind invitation to remain with him at this post. We immediately visited Mr. Connolly, the resident partner of the North-West Company, and presented to him Mr. Mac Gillivray's circular letter. He assured us that he should be most desirous to forward our progress by every means in his power, and we subsequently had ample proofs of his sincerity and kindness. The unexpected addition of our party to the winter residents at this post, rendered an increase of apartments necessary; and our men were immediately appointed to complete and arrange an unfinished building as speedily as possible.

November 8.—Some mild weather succeeded to the severe frosts we had at our arrival; and the lake had not been entirely

frozen before the 6th; but this morning the ice was sufficiently firm to admit of sledges crossing it. The dogs were harnessed at a very early hour, and the winter operations commenced by sending for a supply of fish from Swampy River, where men had been stationed to collect it, just before the frost set in. Both men and dogs appeared to enjoy the change; they started in full glee, and drove rapidly along. An Indian, who had come to the house on the preceding evening to request some provision for his family, whom he represented to be in a state of starvation, accompanied them. His party had been suffering greatly under the epidemic diseases of hooping-cough and measles; and the hunters were still in too debilitated a state to go out and provide them with meat. A supply was given to him, and the men were directed to bring his father, an old and faithful hunter, to the house, that he might have the comforts of nourishment and warmth. He was brought accordingly, but these attentions were unavailing, as he died a few days afterwards.

Two days before his death I was surprised to observe him sitting for nearly three hours, in a piercingly sharp day, in the saw-pit, employed in gathering the dust, and throwing it by handfuls over his body, which was naked to the waist. As the man was in possession of his mental faculties, I conceived he was performing some devotional act preparatory to his departure, which he felt to be approaching, and induced by the novelty of the incident, I went twice to observe him more closely; but when he perceived that he was noticed, he immediately ceased his operation, hung down his head, and, by his demeanour, intimated that he considered my appearance an intrusion. The residents at the fort could give me no information on the subject, and I could not learn that the Indians in general observe any particular ceremony on the approach of death.

November 15.—The sky had been overcast during the last week; the sun shone forth once only, and then not sufficiently for the purpose of obtaining observations.

Faint coruscations of the Aurora Borealis appeared one evening, but their presence did not in the least affect the electrometer or the compass. The ice daily became thicker in the lake, and the frost had now nearly overpowered the rapid current of the Saskatchewan River; indeed, parties of men who were sent from both the forts to search for the Indians, and procure whatever skins and provisions they might have collected, crossed that stream this day on the ice. The white partridges made their first appearance near the house, which birds are considered as the infallible harbingers of severe weather.

Monday, November 22.—The Saskatchewan, and every other river, were now completely covered with ice, except a small stream not far from the fort, through which the current ran very powerfully. In the course of the week we removed into the house our men had prepared since our arrival. We found it at first extremely cold, notwithstanding that a good fire was kept in each apartment, and we frequently expe-

rienced the extremes of heat and cold on opposite sides of the body.

November 24.—We obtained observations for the dip of the needle and intensity of the magnetic force in a spare room. The dip was $83^{\circ} 9' 45''$, and the difference produced by reversing the face of the instrument $13^{\circ} 3' 6''$. When the needle was faced to the west it hung nearly perpendicular. The Aurora Borealis had been faintly visible for a short time the preceding evening. Some Indians arrived in search of provision, having been totally incapacitated from hunting by sickness; the poor creatures looked miserably ill, and they represented their distress to have been extreme. Few recitals are more affecting than those of their sufferings during unfavourable seasons, and in bad situations for hunting and fishing. Many assurances have been given me that men and women are yet living who have been reduced to feed upon the bodies of their own family, to prevent actual starvation; and a shocking case was cited to us, of a woman who had been principal agent

in the destruction of several persons, and amongst the number her husband and nearest relatives, in order to support life.

November 28.—The atmosphere had been clear every day during the last week, about the end of which snow fell, when the thermometer rose from 20° below to 16° above zero. The Aurora Borealis was twice visible, but faint on both occasions. Its appearance did not affect the electrometer, nor could we perceive the compass to be disturbed.

The men brought supplies of moose meat from the hunters' tent, which is pitched near the Basquiau Hill, forty or fifty miles from the house, and whence the greatest part of the meat is procured. The residents have to send nearly the same distance for their fish, and on this service horse-sledges are used. Nets are daily set in Pine Island Lake which occasionally procure some fine sturgeon, tittameg, and trout, but not more than sufficient to supply the officers' table.

December 1.—This day was so remark-

ably fine, that we procured another set of observations for the dip of the needle in the open air; the instrument being placed firmly on a rock, the results gave $83^{\circ} 14' 22''$. The change produced by reversing the face of the instrument was $12^{\circ} 50' 55''$.

There had been a determined thaw during the last three days. The ice on the Saskatchewan River, and some parts of the lake, broke up, and the travelling across either became dangerous. On this account the absence of Wilks, one of our men, caused no small anxiety. He had incautiously undertaken the conduct of a sledge and dogs, in company with a person going to Swampy River for fish. On their return, being unaccustomed to driving, he became fatigued, and seated himself on his sledge, where his companion left him, presuming that he would soon rise and hasten to follow his track. He however returned safe in the morning, and reported that, foreseeing night would set in before he could get across the lake, he prudently retired into the woods before dark, where he remained until day-

light; when the men, who had been despatched to look for him, met him returning to the house, shivering with cold, he having been unprovided with the materials for lighting a fire; which an experienced voyager never neglects to carry.

We had mild weather until the 20th of December. On the 13th there had been a decided thaw, that caused the Saskatchewan, which had again frozen, to re-open, and the passage across it was interrupted for two days. We now received more agreeable accounts from the Indians, who were recovering strength, and beginning to hunt a little; but it was generally feared that their spirits had been so much depressed by the loss of their children and relatives, that the season would be far advanced before they could be roused to any exertion in searching for animals beyond what might be necessary for their own support. It is much to be regretted that these poor men, during their long intercourse with Europeans, have not been taught how pernicious is the grief which produces total

inactivity, and that they have not been furnished with any of the consolations which the Christian religion never fails to afford. This, however, could hardly have been expected from persons who have permitted their own offspring, the half-casts, to remain in lamentable ignorance on a subject of such vital importance. It is probable, however, that an improvement will soon take place among the latter class, as Governor Williams proposes to make the children attend a Sunday school, and has already begun to have divine service performed at his post.

The conversations which I had with the gentlemen in charge of these posts, convinced me of the necessity of proceeding during the winter into the Athabasca department, the residents of which are best acquainted with the nature and resources of the country to the north of the Great Slave Lake; and whence only guides, hunters, and interpreters can be procured. I had previously written to the partners of the North-West Company in that quarter, re-

questing their assistance in forwarding the expedition, and stating what we should require. But, on reflecting upon the accidents that might delay these letters on the the road, I determined on proceeding to Athabasca as soon as I possibly could, and communicated my intention to Governor Williams and Mr. Connolly, with a request that I might be furnished, by the middle of January, with the means of conveyance for three persons, intending that Mr. Back and Hepburn should accompany me, whilst Dr. Richardson and Mr. Hood remained till the spring at Cumberland House.

After the 20th of December the weather became cold, the thermometer constantly below zero. Christmas-day was particularly stormy; but the gale did not prevent the full enjoyment of the festivities which are annually given at Cumberland House on this day. All the men, who had been despatched to different parts in search of provision or furs, returned to the fort on the occasion, and were regaled with a substantial dinner and a dance in the evening.

January 1, 1820.—The new year was ushered in by repeated discharges of musketry; a ceremony which had been observed by the men of both the trading companies for many years. Our party dined with Mr. Connolly, and were treated with a beaver, which we found extremely delicate. In the evening his voyagers were entertained with a dance, in which the Canadians exhibited some grace and much agility; and they contrived to infuse some portion of their activity and spirits into the steps of their female companions. The half-breed women are passionately fond of this amusement, but a stranger would imagine the contrary on witnessing their apparent want of animation. On such occasions they affect a sobriety of demeanour which I understand to be very opposite to their general character.

January 10.—This day I wrote to Governor Williams and Mr. Connolly, requesting them to prepare two canoes, with crews and appointments, for the conveyance of Dr. Richardson and Mr. Hood, with our

stores, to Chipewyan, as soon as the navigation should open, and had the satisfaction of receiving from both these gentlemen renewed assurances of their desire to promote the objects of the expedition. I conceived it to be necessary, previous to my departure, to make some arrangement respecting the men who were engaged at Stromness. Only one of them was disposed to extend his engagement, and proceed beyond the Athabasca Lake; and, as there was much uncertainty whether the remaining three could get from the Athabasca to York Factory sufficiently early to secure them a passage in the next Hudson's Bay ship, I resolved not to take them forward, unless Dr. Richardson and Mr. Hood should fail in procuring other men from these establishments next spring, but to despatch them down to York to bring up our stores to this place: after which they might return to the coast in time to secure their passage in the first ship.

I delivered to Dr. Richardson and Mr. Hood a memorandum, containing the ar-

rangements which had been made with the two Companies, respecting their being forwarded in the spring, and some other points of instruction for their guidance in my absence; together with directions to forward the map of our route, which had been finished since our arrival by Mr. Hood, the drawings and the collections of natural history, by the first opportunity, to York Factory for conveyance to England.*

The houses of the two Companies at this post are situated close to each other, at the upper extremity of a narrow island, which separates Pine Island Lake from the Saskatchewan River, and are about two miles and three quarters from the latter in a northern direction. They are log-houses, built without much regard to comfort, surrounded by lofty stockades, and flanked with wooden bastions. The difficulty of

* As Samuel Wilks, who had accompanied the expedition from England, proved to be quite unequal to the fatigue of the journey, I directed him to be discharged in the spring, and sent to England by the next ship.

conveying glass into the interior has precluded its use in the windows, where its place is poorly supplied by parchment, imperfectly made by the native women from the skin of the rein-deer. Should this post, however, continue to be the residence of Governor Williams, it will be much improved in a few years, as he is devoting his attention to that point. The land around Cumberland House is low, but the soil, from having a considerable intermixture of limestone, is good, and capable of producing abundance of corn, and vegetables of every description. Many kinds of pot-herbs have already been brought to some perfection, and the potatoes bid fair* to equal those of England. The spontaneous productions of nature would afford ample nourishment for all the European animals. Horses feed extremely well even during the winter, and so would oxen if provided with hay, which might be easily done.* Pigs also improve,

* "The wild buffalo scrapes away the snow with its feet to get at the herbage beneath, and the horse,

but require to be kept warm in the winter. Hence it appears, that the residents might easily render themselves far less dependant on the Indians for support, and be relieved from the great anxiety which they too often suffer when the hunters are unsuccessful. The neighbourhood of the houses has been much cleared of wood, from the great demand for fuel; there is, therefore, little to admire in the surrounding scenery, especially in its winter garb; few animated objects occur to enliven the scene; an occasional fox, marten, rabbit, or wolf, and a few birds, contribute the only variety. The birds which remained were ravens, magpies, partridges, cross-bills, and wood-peckers. In this universal stillness, the residents at a post feel little disposed to wander abroad, except when called forth by their occupa-

which was introduced by the Spanish invaders of Mexico, and may be said to have become naturalized, does the same; but it is worthy of remark, that the ox, more lately brought from Europe, has not yet acquired an art so necessary for procuring its food."—
(Extract from Dr. Richardson's Journal.)

tions; and as ours were of a kind best performed in a warm room, we imperceptibly acquired a sedentary habit. In going out, however, we never suffered the slightest inconvenience from the change of temperature, though the thermometer, in the open air, stood occasionally thirty degrees below zero.

The tribe of Indians, who reside in the vicinity, and frequent these establishments, is that of the Crees, or Knisteneaux. They were formerly a powerful and numerous nation, which ranged over a very extensive country, and were very successful in their predatory excursions against their neighbours, particularly the northern Indians, and some tribes on the Saskatchewan and Beaver Rivers; but they have long ceased to be held in any fear, and are now, perhaps, the most harmless and inoffensive of the whole Indian race. This change is entirely to be attributed to their intercourse with Europeans; and the vast reduction in their numbers, occasioned, I fear, principally, by the injudicious introduction of

ardent spirits. They are so passionately fond of this poison, that they will make any sacrifice to obtain it. They are good hunters, and in general active. Having laid the bow and arrow altogether aside, and the use of snares, except for rabbits and partridges, they depend entirely on the Europeans for the means of gaining subsistence, as they require guns, and a constant supply of powder and shot; so that these Indians are probably more completely under the power of the trader than any of the other tribes. As I only saw a few straggling parties of them during short intervals, and under unfavourable circumstances of sickness and famine, I am unable to give, from personal observation, any detail of their manners and customs; and must refer the reader to Dr. Richardson's account of them in the following chapter. That gentleman, during his long residence at the post, had many opportunities of seeing them and acquiring their language.

January 17.—This morning the sporting part of our society had rather a novel di-

version: intelligence having been brought that a wolf had borne away a steel trap, in which he had been caught, a party went in search of the marauder, and took two English bull dogs and a terrier, which had been brought into the country this season. On the first sight of the animal the dogs became alarmed, and stood barking at a distance, and probably would not have ventured to advance, had they not seen the wolf fall by a shot from one of the gentlemen; they then, however, went up and behaved courageously, and were enraged by the bites they received. The wolf soon died of its wounds, and the body was brought to the house, where a drawing of it was taken by Mr. Hood, and the skin preserved by Dr. Richardson. Its general features bore a strong resemblance to many of the dogs about the fort, but it was larger and had a more ferocious aspect. Mr. Back and I were too much occupied in preparing for our departure on the following day to join this excursion.

The position of Cumberland House, by

our observations, is latitude $53^{\circ} 56' 40''$ N.; longitude $102^{\circ} 16' 41''$ W., by the chronometers; variation, $17^{\circ} 17' 29''$ E.; dip of the needle, $83^{\circ} 12' 50''$. The whole of the travelling distance between York Factory and Cumberland House is about six hundred and ninety miles.

CHAPTER III.

*Dr. Richardson's Residence at Cumberland House—
His Account of the Cree Indians.*

FROM the departure of Messrs. Franklin and Back, on the 19th January, for Chipewyan, until the opening of the navigation in the spring, the occurrences connected with the expedition were so much in the ordinary routine of a winter's residence at Fort Cumberland, that they may be, perhaps, appropriately blended with the following general but brief account of that district and its inhabitants.

Cumberland House was originally built by Hearne, a year or two after his return from the Copper-mine River, and has ever since been considered by the Hudson's Bay Company as a post of considerable importance. Previous to that time the natives carried their furs down to the shores of

Hudson's Bay, or disposed of them nearer home to the French Canadian traders, who visited this part of the country as early as the year 1697.

The Cumberland House district, extending about one hundred and fifty miles from east to west along the banks of the Saskatchewan, and about as far from north to south, comprehends, on a rough calculation, upwards of twenty thousand square miles, and is frequented at present by about one hundred and twenty Indian hunters. Of these a few have several wives, but the majority only one; and, as some are unmarried, we shall not err greatly in considering the number of married women as only slightly exceeding that of the hunters. The women marry very young, have a custom of suckling their children for several years, and are besides exposed constantly to fatigue and often to famine; hence they are not prolific, bearing upon an average not more than four children, of whom two may attain the age of puberty. Upon these data the amount of each family may be stated at five, and

the whole Indian population in the district at five hundred.

This is but a small population for such an extent of country, yet their mode of life occasionally subjects them to great privations. The winter of our residence at Cumberland House proved extremely severe to the Indians. The hooping-cough made its appearance amongst them in the autumn, and was followed by the measles, which in the course of the winter spread through the tribe. Many died, and most of the survivors were so enfeebled as to be unable to pursue the necessary avocations of hunting and fishing. Even those who experienced only a slight attack, or escaped the sickness altogether, dispirited by the scenes of misery which environed them, were rendered incapable of affording relief to their distressed relations, and spent their time in conjuring and drumming to avert the pestilence. Those who were able came to the fort and received relief, but many who had retired with their families to distant corners, to pursue their winter hunts, experienced all

the horrors of famine. One evening, early in the month of January, a poor Indian entered the North-West Company's House, carrying his only child in his arms, and followed by his starving wife. They had been hunting apart from the other bands, had been unsuccessful, and whilst in want were seized with the epidemical disease. An Indian is accustomed to starve, and it is not easy to elicit from him an account of his sufferings. This poor man's story was very brief; as soon as the fever abated, he set out with his wife for Cumberland House, having been previously reduced to feed on the bits of skin and offal which remained about their encampment. Even this miserable fare was exhausted, and they walked several days without eating, yet exerting themselves far beyond their strength that they might save the life of the infant. It died almost within sight of the house. Mr. Connolly, who was then in charge of the post, received them with the utmost humanity, and instantly placed food before them; but no language can describe the manner in

which the miserable father dashed the morsel from his lips and deplored the loss of his child. Misery may harden a disposition naturally bad, but it never fails to soften the heart of a good man.

The *origin* of the Crees, to which nation the Cumberland House Indians belong, is, like that of the other Aborigines of America, involved in obscurity; but the researches now making into the nature and affinities of the languages spoken by the different Indian tribes, may eventually throw some light on the subject. Indeed, the American philologists seem to have succeeded already in classing the known dialects into three languages:—1st. The Floridean, spoken by the Creeks, Chickesaws, Choctaws, Cherokees, Pascagoulas, and some other tribes, who inhabit the southern parts of the United States. 2d. The Iroquois, spoken by the Mengwe, or Six Nations, the Wyandots, the Nadowessies, and Asseeneepoytuck. 3d. The Lenni-lenapè, spoken by a great family more widely spread than the other two, and from which, together

with a vast number of other tribes, are sprung our Crees. Mr. Heckewelder, a missionary, who resided long amongst these people, and from whose paper (published in the *Transactions of the American Philosophical Society*) the above classification is taken, states that the Lenapè have a tradition amongst them, of their ancestors having come from the westward, and taken possession of the whole country from the Missouri to the Atlantic, after driving away or destroying the original inhabitants of the land, whom they termed Alligewi. In this migration and contest, which endured for a series of years, the Mengwe, or Iroquois, kept pace with them, moving in a parallel but more northerly line, and finally settling on the banks of the St. Lawrence, and the great lakes from whence it flows. The Lenapè, being more numerous, peopled not only the greater part of the country at present occupied by the United States, but also sent detachments to the northward as far as the banks of the River Mississippi and the shores of Hudson's Bay. The principal of

their northern tribes are now known under the names of Saulteurs or Chippeways, and Crees; the former inhabiting the country betwixt Lakes Winipeg and Superior, the latter frequenting the shores of Hudson's Bay, from Moose to Churchill, and the country from thence as far to the westward as the plains which lie betwixt the forks of the Saskatchewan.

These Crees, formerly known by the French Canadian traders under the appellation of Knisteneaux, generally designate themselves as Eithinyoowuc (*men*), or, when they wish to discriminate themselves from the other Indian nations, as Nathehwy-withinyoowuc (*Southern-men*).*

* Much confusion has arisen from the great variety of names applied without discrimination to the various tribes of Saulteurs and Crees. Heckewelder considers the Crees of Moose Factory to be a branch of that tribe of the Lenapè which is named Minsi, or Wolf Tribe. He has been led to form this opinion, from the similarity of the name given to these people by Monsieur Jeremie, namely, Monsonies; but the truth is, that their real name is Mongsoa-eythinyoowuc, or

The original character of the Crees must have been much modified by their long intercourse with Europeans; hence it is to be understood, that we confine ourselves in the following sketch to their present condi-

Moose-deer Indians; hence the name of the factory and river on which it is built. The name Knisteneaux, Kristeneaux, or Killisteneaux, was anciently applied to a tribe of Crees, now termed Maskegons, who inhabit the river Winipeg. This small tribe still retains the peculiarities of customs and dress, for which it was remarkable many years ago, as mentioned by Mr. Henry, in the interesting account of his journeys in these countries. They are said to be great rascals. The great body of the Crees were at that time named Opimmitish Ininiwuc, or Men of the Woods. It would, however, be an endless task to attempt to determine the precise people designated by the early French writers. Every small band, naming itself from its hunting grounds, was described as a different nation. The Chippeways, who frequented the Lake of the Woods were named from a particular act of pillage—Pilliers, or Robbers; and the name Saulteurs, applied to a principal band that frequented the Sault St. Marie, has been by degrees extended to the whole tribe. It is frequently pronounced and written *Sotoos*.

tion, and more particularly to the Crees of Cumberland House. The moral character of a hunter is acted upon by the nature of the land he inhabits, the abundance or scarcity of food, and we may add, in the present case, his means of access to spirituous liquors. In a country so various in these respects as that inhabited by the Crees, the causes alluded to must operate strongly in producing a considerable difference of character amongst the various hordes. It may be proper to bear in mind, also, that we are about to draw the character of a people whose only rule of conduct is public opinion, and to try them by a morality founded on divine revelation, the only standard that can be referred to by those who have been educated in a land to which the blessings of the Gospel have extended.

Bearing these considerations in mind then, we may state the Crees to be a vain, fickle, improvident, and indolent race, and not very strict in their adherence to truth, being

great boasters ; but, on the other hand, they strictly regard the rights of property,* are susceptible of the kinder affections, capable of friendship, very hospitable, tolerably kind to their women, and withal inclined to peace.

Much of the faulty part of their character, no doubt, originates in their mode of life ; accustomed as a hunter to depend greatly on chance for his subsistence, the Cree takes little thought of to-morrow ; and the most offensive part of his behaviour—the habit of boasting—has been probably assumed as a necessary part of his armour, which operates upon the fears of his enemies. They are countenanced, however, in this failing by the practice of the ancient Greeks, and perhaps by that of every other nation in its ruder state. Every Cree fears the medical or conjuring powers of his neighbour ; but, at the same time, exalts his own attainments to the skies. “ I am God-

* This is, perhaps, true of the Cumberland House Crees alone : many of the other tribes of Crees are stated by the traders to be thieves.

like," is a common expression amongst them, and they prove their divinity-ship by eating live coals, and by various tricks of a similar nature. A medicine bag is an indispensable part of a hunter's equipment. It is generally furnished with a little bit of indigo, blue vitriol, vermilion, or some other showy article; and is, when in the hands of a noted conjurer, such an object of terror to the rest of the tribe, that its possessor is enabled to fatten at his ease upon the labours of his deluded countrymen.

A fellow of this description came to Cumberland House in the winter of 1819. Notwithstanding the then miserable state of the Indians, the rapacity of this wretch had been preying upon their necessities, and a poor hunter was actually at the moment pining away under the influence of his threats. The mighty conjurer, immediately on his arrival at the house, began to trumpet forth his powers, boasting, among other things, that although his hands and feet were tied as securely as possible, yet, when placed in a conjuring-house, he would

speedily disengage himself by the aid of two or three familiar spirits, who were attendant on his call. He was instantly taken at his word, and, that his exertions might not be without an aim, a *capot* or great coat was promised as the reward of his success. A conjuring-house having been erected in the usual form, that is, by sticking four willows in the ground and tying their tops to a hoop at the height of six or eight feet, he was fettered completely by winding several fathoms of rope round his body and extremities, and placed in its narrow apartment, not exceeding two feet in diameter. A moose-skin being then thrown over the frame, secluded him from our view. He forthwith began to chant a kind of hymn in a very monotonous tone. The rest of the Indians, who seemed in some doubt respecting the powers of a devil when put in competition with those of a white man, ranged themselves around, and watched the result with anxiety. Nothing remarkable occurred for a long time. The conjurer continued his song at intervals, and it was occasionally

taken up by those without. In this manner an hour and a half elapsed ; but at length our attention, which had begun to flag, was roused by the violent shaking of the conjuring-house. It was instantly whispered round the circle, that at least one devil had crept under the moose-skin. But it proved to be only the " God-like man" trembling with cold. He had entered the lists stript to the skin, and the thermometer stood very low that evening. His attempts were continued, however, with considerable resolution for half an hour longer, when he reluctantly gave in. He had found no difficulty in slipping through the noose when it was formed by his countrymen ; but, in the present instance, the knot was tied by Governor Williams, who is an expert sailor. After this unsuccessful exhibition his credit sunk amazingly, and he took the earliest opportunity of sneaking away from the fort.

About two years ago a conjurer paid more dearly for his temerity. In a quarrel with an Indian he threw out some obscure threats of vengeance which passed unnoticed

at the time, but were afterwards remembered. They met in the spring at Carlton House, after passing the winter in different parts of the country, during which the Indian's child died. The conjurer had the folly to boast that he had caused its death, and the enraged father shot him dead on the spot. It may be remarked, however, that both of these Indians were inhabitants of the plains, and had been taught, by their intercourse with the turbulent Stone Indians, to set but comparatively little value on the life of a man.

It might be thought that the Crees have benefited by their long intercourse with civilized nations. That this is not so much the case as it ought to be, is not entirely their own fault. They are capable of being, and I believe willing to be, taught; but no pains have hitherto been taken to inform their minds,* and their white acquaintances

* Since these remarks were written, the union of the rival companies has enabled the gentlemen, who have now the management of the fur trade, to take some decided steps for the religious instruction and improve-

seem in general to find it easier to descend to the Indian customs and modes of thinking, particularly with respect to women, than to attempt to raise the Indians to theirs. Indeed, such a lamentable want of morality has been displayed by the white traders in their contests for the interests of their respective companies, that it would require a long series of good conduct to efface from the minds of the native population the ideas they have formed of the white character. Notwithstanding the frequent violations of the rights of property they have witnessed, and but too often experienced in their own persons, these savages, as they are termed, remain strictly honest. During their visits to a post, they are suffered to enter every apartment in the house without the least restraint, and although articles of value to them are scattered about, nothing is ever missed. They scrupulously avoid moving anything from its place, although they are

ment of the natives and half-breed Indians, which have been more particularly referred to in the introduction.

often prompted by curiosity to examine it. In some cases, indeed, they carry this principle to a degree of self-denial which would hardly be expected. It often happens that meat, which has been paid for, (if the poisonous draught it procures them can be considered as payment,) is left at their lodges until a convenient opportunity occurs of carrying it away. They will rather pass several days without eating than touch the meat thus intrusted to their charge, even when there exists a prospect of replacing it.

The hospitality of the Crees is unbounded. They afford a certain asylum to the half-breed children when deserted by their unnatural white fathers; and the infirm, and indeed every individual in an encampment, share the provisions of a successful hunter as long as they last. Fond, too, as a Cree is of spirituous liquors, he is not happy unless all his neighbours partake with him. It is not easy, however, to say what share ostentation may have in the apparent munificence in the latter article; for when an Indian, by a good hunt, is enabled to treat

the others with a keg of rum, he becomes the chief of a night, assumes no little stateliness of manner, and is treated with deference by those who regale at his expense. Prompted also by the desire of gaining a *name*, they lavish away the articles they purchase at the trading posts, and are well satisfied if repaid in praise.

Gaming is not uncommon amongst the Crees of all the different districts, but it is pursued to greater lengths by those bands who frequent the plains, and who, from the ease with which they obtain food, have abundant leisure. The game most in use amongst them, termed *puckesann*, is played with the stones of a species of *prunus*, which, from this circumstance, they term *puckesann-meena*. The difficulty lies in guessing the number of stones which are tossed out of a small wooden dish, and the hunters will spend whole nights at the destructive sport, staking their most valuable articles, powder and shot.

It has been remarked by some writers, that the aboriginal inhabitants of America

are deficient in passion for the fair sex. This is by no means the case with the Crees; on the contrary, their practice of seducing each other's wives proves the most fertile source of their quarrels. When the guilty pair are detected, the woman generally receives a severe beating, but the husband is, for the most part, afraid to reproach the male culprit until they get drunk together at the fort; then the remembrance of the offence is revived, a struggle ensues, and the affair is terminated by the loss of a few handfuls of hair. Some husbands, however, feel more deeply the injury done to their honour, and seek revenge even in their sober moments. In such cases it is not uncommon for the offended party to walk with great gravity up to the other, and deliberately seizing his gun, or some other article of value, to break it before his face. The adulterer looks on in silence, afraid to make any attempt to save his property. In this respect, indeed, the Indian character seems to differ from the European, that an Indian, instead of letting his anger increase

with that of his antagonist, assumes the utmost coolness, lest he should push him to extremities.

Although adultery is sometimes punished amongst the Crees in the manner above described, yet it is no crime, provided the husband receives a valuable consideration for his wife's prostitution. Neither is chastity considered as a virtue in a female before marriage, that is, before she becomes the exclusive property of one hunter.

The Cree women are not in general treated harshly by their husbands, and possess considerable influence over them. They often eat, and even get drunk, in consort with the men; a considerable portion of the labour, however, falls to the lot of the wife. She makes the hut, cooks, dresses the skins, and, for the most part, carries the heaviest load; but, when she is unable to perform her task, the husband does not consider it beneath his dignity to assist her. In illustration of this remark, I may quote the case of an Indian who visited the fort in winter. This poor man's wife

had lost her feet by the frost, and he was compelled, not only to hunt and do all the menial offices himself, but in winter to drag his wife with their stock of furniture from one encampment to another. In the performance of this duty, as he could not keep pace with the rest of the tribe in their movements, he more than once nearly perished of hunger.

These Indians, however, capable as they are of behaving thus kindly, affect in their discourse to despise the softer sex, and on solemn occasions will not suffer them to eat before them, or even come into their presence. In this they are countenanced by the white residents, most of whom have Indian or half-breed wives, but seem afraid of treating them with the tenderness or attention due to every female, lest they should themselves be despised by the Indians. At least, this is the only reason they assign for their neglect of those whom they make partners of their beds and mothers of their children.

Both sexes are fond of, and excessively

indulgent to their children. The father never punishes them, and if the mother, more hasty in her temper, sometimes bestows a blow or two on a troublesome child, her heart is instantly softened by the roar which follows, and she mingles her tears with those that streak the smoky face of her darling. It may be fairly said, then, that restraint or punishment forms no part of the education of an Indian child, nor are they early trained to that command over their temper which they exhibit in after years.

The discourse of the parents is never restrained by the presence of their children, every transaction between the sexes being openly talked of before them.

The Crees having early obtained arms from the European traders, were enabled to make harassing inroads on the lands of their neighbours, and are known to have made war excursions as far to the westward as the Rocky Mountains, and to the northward as far as M'Kenzie's River; but their enemies being now as well armed as themselves, the case is much altered.

They show great fortitude in the endurance of hunger, and the other evils incident to a hunter's life ; but any unusual accident dispirits them at once, and they seldom venture to meet their enemies in open warfare, or to attack them even by surprise, unless with the advantage of superiority of numbers. Perhaps they are much deteriorated in this respect by their intercourse with Europeans. Their existence at present hangs upon the supplies of ammunition and clothing they receive from the traders, and they deeply feel their dependant situation. But their character has been still more debased by the passion for spirituous liquors, so assiduously fostered among them. To obtain the noxious beverage they descend to the most humiliating entreaties, and assume an abjectness of behaviour which does not seem natural to them, and of which not a vestige is to be seen in their intercourse with each other. Their character has sunk among the neighbouring nations. They are no longer the warriors who drove before them the inhabitants of the Saskatch-

awan and Missinippi. The Cumberland House Crees in particular have been long disused to war. Betwixt them and their ancient enemies, the Slave nations, lie the extensive plains of Saskatchewan, inhabited by the powerful Asseeneepoytuck, or Stone Indians, who having whilst yet a small tribe entered the country under the patronage of the Crees, now render back the protection they received.

The manners and customs of the Crees have, probably since their acquaintance with Europeans, undergone a change at least equal to that which has taken place in their moral character; and, although we heard of many practices peculiar to them, yet they appeared to be nearly as much honoured in the breach as the observance. We shall, however, briefly notice a few of the most remarkable customs.

When a hunter marries his first wife, he usually takes up his abode in the tent of his father-in-law, and of course hunts for the family; but when he becomes a father, the families are at liberty to separate, or remain

together, as their inclinations prompt them. His second wife is for the most part the sister of the first, but not necessarily so, for an Indian of another family often presses his daughter upon a hunter whom he knows to be capable of maintaining her well. The first wife always remains the mistress of the tent, and assumes an authority over the others, which is not in every case quietly submitted to. It may be remarked, that whilst an Indian resides with his wife's family, it is extremely improper for his mother-in-law to speak, or even look at him; and when she has a communication to make, it is the etiquette that she should turn her back upon him, and address him only through the medium of a third person. This singular custom is not very creditable to the Indians, if it really had its origin in the cause which they at present assign for it, namely, that a woman's speaking to her son-in-law is a sure indication of her having conceived a criminal affection for him.

It appears also to have been an ancient practice for an Indian to avoid eating or

sitting down in the presence of the father-in-law. We received no account of the origin of this custom, and it is now almost obsolete amongst the Cumberland House Crees, though still partially observed by those who frequent Carlton.

Tattooing is almost universal with the Crees. The women are in general content with having one or two lines drawn from the corners of the mouth towards the angles of the lower jaw; but some of the men have their bodies covered with a great variety of lines and figures. It seems to be considered by most rather as a proof of courage than an ornament, the operation being very painful, and, if the figures are numerous and intricate, lasting several days. The lines on the face are formed by dexterously running an awl under the cuticle, and then drawing a cord, dipt in charcoal and water, through the canal thus formed. The punctures on the body are formed by needles of various sizes set in a frame. A number of hawk bells attached to this frame serve by their noise to cover the suppressed

groans of the sufferer, and, probably for the same reason, the process is accompanied with singing. An indelible stain is produced by rubbing a little finely-powdered willow-charcoal into the punctures. A half-breed, whose arm I amputated, declared, that tattooing was not only the most painful operation of the two, but rendered infinitely more difficult to bear by its tediousness, having lasted in his case three days.

A Cree woman, at certain periods, is laid under considerable restraint. They are far, however, from carrying matters to the extremities mentioned by Hearne in his description of the Chipewyans, or Northern Indians. She lives apart from her husband also for two months if she has borne a boy, and for three if she has given birth to a girl.

Many of the Cree hunters are careful to prevent a woman from partaking of the head of a moose-deer, lest it should spoil their future hunts; and for the same reason they avoid bringing it to a fort, fearing lest

the white people should give the bones to the dogs.

The games or sports of the Crees are various. One termed the game of the Mitten, is played with four balls, three of which are plain, and one marked. These being hid under as many mittens, the opposite party is required to fix on that which is marked. He gives or receives a feather according as he guesses right or wrong. When the feathers, which are ten in number, have all passed into one hand, a new division is made; but when one of the parties obtains possession of them thrice, he seizes on the stakes.

The game of Platter is more intricate, and is played with the claws of a bear, or some other animal, marked with various lines and characters. These dice, which are eight in number, and cut flat at their large end, are shook together in a wooden dish, tossed into the air and caught again. The lines traced on such claws as happen to alight on the platter in an erect position,

indicate what number of counters the caster is to receive from his opponent.

They have, however, a much more manly amusement termed the *Cross*, although they do not engage even in it without depositing considerable stakes. An extensive meadow is chosen for this sport, and the articles staked are tied to a post, or deposited in the custody of two old men. The combatants being stript and painted, and each provided with a kind of battledore or racket, in shape resembling the letter P, with a handle about two feet long and a head loosely wrought with net-work, so as to form a shallow bag, range themselves on different sides. A ball being now tossed up in the middle, each party endeavours to drive it to their respective goals, and much dexterity and agility is displayed in the contest. When a nimble runner gets the ball in his *cross*, he sets off towards the goal with the utmost speed, and is followed by the rest, who endeavour to jostle him and shake it out; but, if hard pressed, he discharges it with a jerk, to be forwarded by his own

party, or bandied back by their opponents, until the victory is decided by its passing the goal.

Of the religious opinions of the Crees, it is difficult to give a correct account, not only because they show a disinclination to enter upon the subject, but because their ancient traditions are mingled with the information they have more recently obtained by their intercourse with Europeans.

None of them ventured to describe the original formation of the world, but they all spoke of an universal deluge, caused by an attempt of the fish to drown Woesackootchacht, a kind of demi-god, with whom they had quarrelled. Having constructed a raft, he embarked with his family and all kinds of birds and beasts. After the flood had continued for some time, he ordered several water-fowl to dive to the bottom; they were all drowned: but a musk-rat having been despatched on the same errand, was more successful, and returned with a mouthful of mud, out of which Woesackootchacht, imitating the mode in which the

rats construct their houses, formed a new earth. First, a small conical hill of mud appeared above the water; by-and-by, its base gradually spreading out, it became an extensive bank, which the rays of the sun at length hardened into firm land. Notwithstanding the power that Woësackootchacht here displayed, his person is held in very little reverence by the Indians; and, in return, he seizes every opportunity of tormenting them. His conduct is far from being moral, and his amours, and the disguises he assumes in the prosecution of them, are more various and extraordinary than those of the Grecian Jupiter himself; but as his adventures are more remarkable for their eccentricity than their delicacy, it is better to pass them over in silence. Before we quit him, however, we may remark, that he converses with all kinds of birds and beasts in their own languages, constantly addressing them by the title of brother, but through an inherent suspicion of his intentions, they are seldom willing to admit of his claims of relationship. The

Indians make no sacrifices to him, not even to avert his wrath. They pay a kind of worship, however, and make offerings to a being, whom they term *Kepoochikawn*.

This deity is represented sometimes by rude images of the human figure, but more commonly merely by tying the tops of a few willow bushes together; and the offerings to him consist of every thing that is valuable to an Indian; yet they treat him with considerable familiarity, interlarding their most solemn speeches with expostulations and threats of neglect, if he fails in complying with their requests. As most of their petitions are for plenty of food, they do not trust entirely to the favour of *Kepoochikawn*, but endeavour, at the same time, to propitiate the *animal*, an imaginary representative of the whole race of larger quadrupeds that are objects of the chase.

In the month of May, whilst I was at Carlton House, the Cree hunter engaged to attend that post resolved upon dedicating several articles to *Kepoochikawn*, and as I had made some inquiries of him respecting

their modes of worship, he gave me an invitation to be present. The ceremony took place in a sweating-house, or as it may be designated from its more important use, a *temple*, which was erected for the occasion by the worshipper's two wives. It was framed of arched willows, interlaced so as to form a vault capable of containing ten or twelve men, ranged closely side by side, and high enough to admit of their sitting erect. It was very similar in shape to an oven or the kraal of a Hottentot, and was closely covered with moose skins, except at the east end, which was left open for a door. Near the centre of the building there was a hole in the ground, which contained ten or twelve red-hot stones, having a few leaves of the *taccohaymenan*, a species of *prunus*, strewed around them. When the women had completed the preparations, the hunter made his appearance, perfectly naked, carrying in his hand an image of Kepoo-chikawn, rudely carved, and about two feet long. He placed his god at the upper end of the sweating-house, with his face towards

the door, and proceeded to tie round its neck his offerings, consisting of a cotton handkerchief, a looking-glass, a tin pan, a piece of riband, and a bit of tobacco, which he had procured the same day, at the expense of fifteen or twenty skins. Whilst he was thus occupied, several other Crees, who were encamped in the neighbourhood, having been informed of what was going on, arrived, and stripping at the door of the temple, entered, and ranged themselves on each side; the hunter himself squatted down at the right hand of Kepoochikawn. The atmosphere of the temple having become so hot that none but zealous worshippers would venture in, the interpreter and myself sat down on the threshold, and the two women remained on the outside as attendants.

The hunter, who throughout officiated as high priest, commenced by making a speech to Kepoochikawn, in which he requested him to be propitious, told him of the value of the things now presented, and cautioned him against ingratitude. This oration was delivered in a monotonous tone, and with

great rapidity of utterance, and the speaker retained his squatting posture, but turned his face to his god. At its conclusion, the priest began a hymn, of which the burthen was, "I will walk with God, I will go with the animal;" and, at the end of each stanza, the rest joined in an insignificant chorus. He next took up a calumet, filled with a mixture of tobacco and bear-berry leaves, and holding its stem by the middle, in a horizontal position, over the hot stones, turned it slowly in a circular manner, following the course of the sun. Its mouth-piece being then with much formality held for a few seconds to the face of Kepoochikawn, it was next presented to the earth, having been previously turned a second time over the hot stones; and afterwards, with equal ceremony, pointed in succession to the four quarters of the sky; then drawing a few whiffs from the calumet himself, he handed it to his left hand neighbour, by whom it was gravely passed round the circle; the interpreter and myself, who were seated at the door, were asked to par-

take in our turn, but requested to keep the head of the calumet within the threshold of the sweating-house. When the tobacco was exhausted by passing several times round, the hunter made another speech, similar to the former; but was, if possible, still more urgent in his requests. A second hymn followed, and a quantity of water being sprinkled on the hot stones, the attendants were ordered to close the temple, which they did, by very carefully covering it up with moose skins. We had no means of ascertaining the temperature of the sweating-house; but before it was closed, not only those within, but also the spectators without, were perspiring freely. They continued in the vapour bath for thirty-five minutes, during which time a third speech was made, and a hymn was sung, and water occasionally sprinkled on the stones, which still retained much heat, as was evident from the hissing noise they made. The coverings were then thrown off, and the poor half-stewed worshippers exposed freely to the air; but they kept their squatting

postures until a fourth speech was made, in which the deity was strongly reminded of the value of the gifts, and exhorted to take an early opportunity of showing his gratitude. The ceremony concluded by the sweaters scampering down to the river, and plunging into the stream. It may be remarked, that the door of the temple, and, of course, the face of the god, was turned to the rising sun; and the spectators were desired not to block up entirely the front of the building, but to leave a lane for the entrance or exit of some influence of which they could not give me a correct description. Several Indians, who lay on the outside of the sweating-house as spectators, seemed to regard the proceedings with very little awe, and were extremely free in the remarks and jokes they passed upon the condition of the sweaters, and even of Kepoochikawn himself. One of them made a remark, that the shawl would have been much better bestowed upon himself than upon Kepoochikawn, but the same fellow

afterwards stripped and joined in the ceremony.

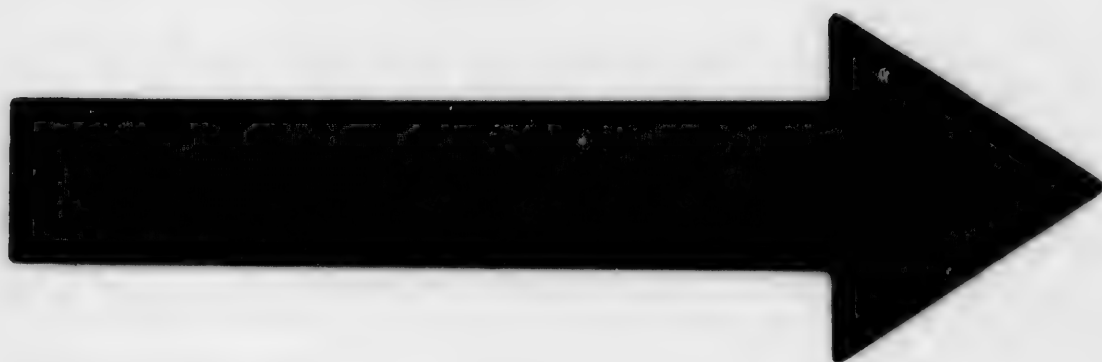
I did not learn that the Indians worship any other god by a specific name. They often refer, however, to the Keetchee-Maneeto, or Great Master of Life; and to an evil spirit, or Maatche-Maneeto. They also speak of Weettako, a kind of vampyre or devil, into which those who have fed on human flesh are transformed.

Whilst at Carlton, I took an opportunity of asking a communicative old Indian, of the Blackfoot nation, his opinion of a future state; he replied, that they had heard from their fathers, that the souls of the departed have to scramble with great labour up the sides of a steep mountain, upon attaining the summit of which they are rewarded with the prospect of an extensive plain, abounding in all sorts of game, and interspersed here and there with new tents, pitched in agreeable situations. Whilst they are absorbed in the contemplation of this delightful scene, they are desecrated by

the inhabitants of the happy land, who, clothed in new skin-dresses, approach and welcome with every demonstration of kindness those Indians who have led good lives; but the bad Indians, who have imbrued their hands in the blood of their countrymen, are told to return from whence they came, and without more ceremony precipitated down the steep sides of the mountain.

Women, who have been guilty of infanticide, never reach the mountain at all, but are compelled to hover round the seats of their crimes, with branches of trees tied to their legs. The melancholy sounds, which are heard in the still summer evenings, and which the ignorance of the white people considers as the screams of the goat-sucker, are really, according to my informant, the moanings of these unhappy beings.

The Crees have somewhat similar notions, but as they inhabit a country widely different from the mountainous lands of the Blackfoot Indians, the difficulty of their journey lies in walking along a slender and slippery tree, laid as a bridge across a rapid



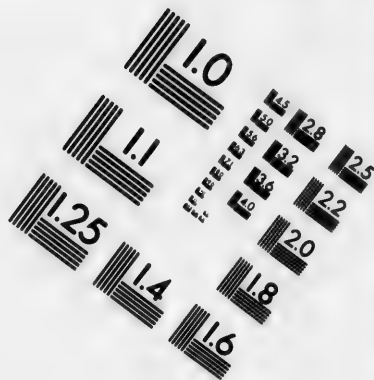
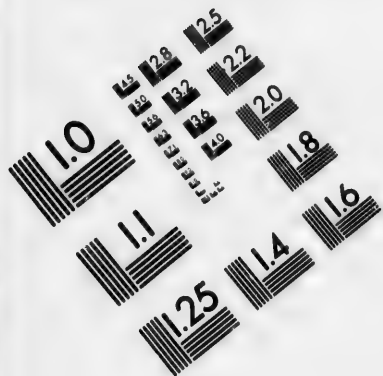
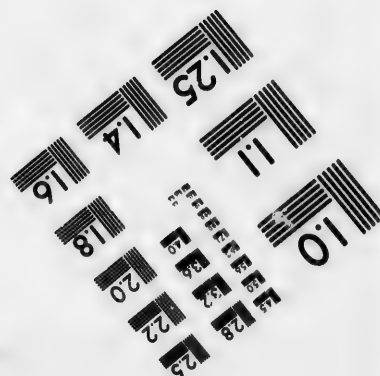
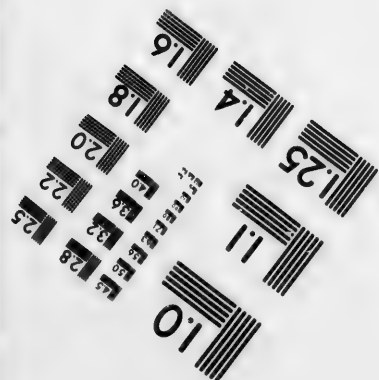
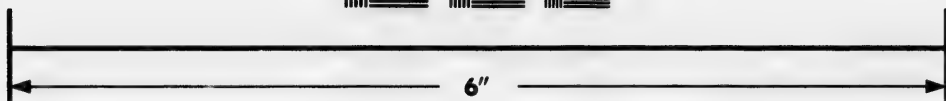
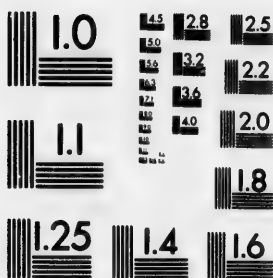


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stream of stinking and muddy water. The night owl is regarded by the Crees with the same dread that it has been viewed by other nations. One small species, which is known to them by its melancholy nocturnal hootings, (for, as it never appears in the day, few even of the hunters have ever seen it,) is particularly ominous. They call it the *cheepai-peethees*, or death bird, and never fail to whistle when they hear its note. If it does not reply to the whistle by its hootings, the speedy death of the inquirer is augured.

When a Cree dies, that part of his property which he has not given away before his death, is burned with him, and his relations take care to place near his grave little heaps of fire-wood, food, pieces of tobacco, and such things as he is likely to need in his journey. Similar offerings are made when they revisit the grave, and as kettles, and other articles of value, are sometimes offered, they are frequently carried off by passengers, yet the relations are not displeased, provided sufficient respect has been

shown to the dead, by putting some other article, although of inferior value, in the place of that which has been taken away.

The Crees are wont to celebrate the returns of the seasons by religious festivals, but we are unable to describe the ceremonial in use on these joyous occasions from personal observation. The following brief notice of a feast, which was given by an old Cree chief, according to his annual custom, on the first croaking of the frogs, is drawn up from the information of one of the guests. A large oblong tent, or lodge, was prepared for the important occasion, by the men of the party, none of the women being suffered to interfere. It faced the setting sun, and great care was taken that every thing about it should be as neat and clean as possible. Three fire-places were raised within it, at equal distances, and little holes were dug in the corners to contain the ashes of their pipes. In a recess, at its upper end, one large image of Kepoochikawn, and many smaller ones, were ranged with their faces towards the door. The food was

prepared by the chief's wife, and consisted of *marrow* pemmican, berries boiled with fat, and various other delicacies that had been preserved for the occasion.

The preparations being completed, and a slave, whom the chief had taken in war, having warned the guests to the feast by the mysterious word *peenasheway*, they came, dressed out in their best garments, and ranged themselves according to their seniority, the elders seating themselves next the chief at the upper end, and the young men near the door.

The chief commenced by addressing his deities in an appropriate speech, in which he told them that he had hastened as soon as summer was indicated by the croaking of the frogs to solicit their favour for himself and his young men, and hoped that they would send him a pleasant and plentiful season. His oration was concluded by an invocation to all the animals in the land, and a signal being given to the slave at the door, he invited them severally by their names to come and partake of the feast.

The Cree chief having by this very general invitation displayed his unbounded hospitality, next ordered one of the young men to distribute a mess to each of the guests. This was done in new dishes of birch bark, and the utmost diligence was displayed in emptying them, it being considered extremely improper in a man to leave any part of that which is placed before him on such occasions. It is not inconsistent with good manners, however, but rather considered as a piece of politeness, that a guest who has been too liberally supplied, should hand the surplus to his neighbour. When the viands had disappeared, each filled his calumet and began to smoke with great assiduity, and in the course of the evening several songs were sung to the responsive sounds of the drum, and seeseequay, their usual accompaniments.

The Cree drum is double-headed, but possessing very little depth, it strongly resembles a tambourine in shape. Its want of depth is compensated, however, by its diameter, which frequently exceeds three

feet. It is covered with moose skin parchment, painted with rude figures of men and beasts, having various fantastic additions, and is beat with a stick. The seeseequay is merely a rattle, formed by enclosing a few grains of shot in a piece of dried hide. These two instruments are used in all their religious ceremonies, except those which take place in a sweating-house.

A Cree places great reliance on his drum, and I cannot adduce a stronger instance than that of the poor man who is mentioned in a preceding page as having lost his only child by famine, almost within sight of the fort. Notwithstanding his exhausted state, he travelled with an enormous drum tied to his back.

Many of the Crees make vows to abstain from particular kinds of food, either for a specific time or for the remainder of their life, esteeming such abstinence to be a certain means of acquiring some supernatural powers, or at least of entailing upon themselves a succession of good fortune.

One of the wives of the Carlton hunter,

of whom we have already spoken as the worshipper of Kepoochikawn, made a determination not to eat of the flesh of the Wawaskeesh or American stag; but during our abode at that place, she was induced to feed heartily upon it, through the intentional deceit of her husband, who told her that it was buffalo meat. When she had finished her meal, her husband told her of the trick, and seemed to enjoy the terror with which she contemplated the consequences of the involuntary breach of her vow. Vows of this nature are often made by a Cree before he joins a war party, and they sometimes, like the eastern bonzes, walk for a certain number of days on all fours, or impose upon themselves some other penance equally ridiculous. By such means the Cree warrior becomes *godlike*; but unless he kills an enemy before his return, his newly-acquired powers are estimated to be productive in future of some direful consequences to himself.

As we did not witness any of the Cree dances ourselves, we shall merely mention

that, like the other North American nations, they are accustomed to practise that amusement on meeting with strange tribes, before going to war, and on other solemn occasions.

The habitual intoxication of the Cumberland House Crees has induced such a disregard of personal appearance, that they are squalid and dirty in the extreme; hence a minute description of their clothing would be by no means interesting. We shall, therefore, only remark in a general manner, that the dress of the male consists of a blanket thrown over the shoulders, a leathern shirt or jacket, and a piece of cloth tied round the middle. The women have in addition a long petticoat; and both sexes wear a kind of wide hose, which, reaching from the ankle to the middle of the thigh, are suspended by strings to the girdle. These hose, or as they are termed *Indian stockings*, are commonly ornamented with beads or ribands, and from their convenience, have been universally adopted by the white residents, as an essential part of their

winter clothing. Their shoes, or rather short boots, for they tie round the ankle, are made of soft dressed moose-skins, and during the winter they wrap several pieces of blanket round their feet.

They are fond of European articles of dress, considering it as mean to be dressed entirely in leather, and the hunters are generally furnished annually with a *capot* or great coat, and the women with shawls, printed calicoes, and other things very unsuitable to their mode of life, but which they wear in imitation of the wives of the traders; all these articles, however showy they may be at first, are soon reduced to a very filthy condition by the Indian custom of greasing the face and hair with soft fat or marrow, instead of washing them with water. This practice they say preserves the skin soft, and protects it from cold in the winter, and the moschetoës in summer; but it renders their presence disagreeable to the olfactory organs of an European, particularly when they are seated in a close tent and near a hot fire.

The only peculiarity which we observed in their mode of rearing children, consists in the use of a sort of cradle, extremely well adapted to their mode of life. The infant is placed in the bag, having its lower extremities wrapt up in soft sphagnum or bog-moss, and may be hung up in the tent, or to the branch of a tree, without the least danger of tumbling out; or in a journey suspended on the mother's back, by a band which crosses the forehead, so as to leave her hands perfectly free. It is one of the neatest articles of furniture they possess, being generally ornamented with beads and bits of scarlet cloth, but it bears a very strong resemblance in its form to a mummy case.

The sphagnum in which the child is laid forms a soft elastic bed, which absorbs moisture very readily, and affords such a protection from the cold of a rigorous winter, that its place would be ill supplied by cloth.

The mothers are careful to collect a sufficient quantity in autumn for winter use;

but when through accident their stock fails, they have recourse to the soft down of the typha, or reed mace, the dust of rotten wood, or even feathers, although none of these articles are so cleanly, or so easily changed as the sphagnum.

The above is a brief sketch of such parts of the manners, character and customs of the Crees, as we could collect from personal observation, or from the information of the most intelligent half-breeds we met with; and we shall merely add a few remarks on the manner in which the trade is conducted at the different inland posts of the Fur Companies.

The standard of exchange in all mercantile transactions with the natives is a beaver skin, the relative value of which, as originally established by the traders, differs considerably from the present worth of the articles it represents; but the Indians are averse to change. Three marten, eight musk-rat, or a single lynx, or wolverene skin, are equivalent to one beaver; a silver fox, white fox, or otter, are reckoned two

beavers, and a black fox, or large black bear, are equal to four; a mode of reckoning which has very little connexion with the real value of these different furs in the European market. Neither has any attention been paid to the original cost of European articles, in fixing the tariff by which they are sold to the Indians. A coarse butcher's knife is one skin, a woollen blanket or a fathom of coarse cloth, eight, and a fowling piece fifteen. The Indians receive their principal outfit of clothing and ammunition on credit in the autumn, to be repaid by their winter hunts; the amount intrusted to each of the hunters varying with their reputations for industry and skill, from twenty to one hundred and fifty skins. The Indians are generally anxious to pay off the debt thus incurred, but their good intentions are often frustrated by the arts of the rival traders. Each of the Companies keeps men constantly employed travelling over the country during the winter, to collect the furs from the different bands of hunters as fast as they are procured. The

poor Indian endeavours to behave honestly, and when he has gathered a few skins sends notice to the post from whence he procured his supplies, but if discovered in the mean time by the opposite party, he is seldom proof against the temptation to which he is exposed. However firm he may be in his denials at first, his resolutions are enfeebled by the sight of a little rum, and when he has tasted the intoxicating beverage, they vanish like smoke; and he brings forth his store of furs, which he has carefully concealed from the scrutinizing eyes of his visitors. This mode of carrying on the trade not only causes the amount of furs, collected by either of the two Companies, to depend more upon the activity of their agents, the knowledge they possess of the motions of the Indians, and the quantity of rum they carry, than upon the liberality of the credits they give, but is also productive of an increasing deterioration of the character of the Indians, and will, probably, ultimately prove destructive to the fur trade itself. Indeed the evil has already,

in part, recoiled upon the traders; for the Indians, long deceived, have become deceivers in their turn, and not unfrequently after having incurred a heavy debt at one post move off to another, to play the same game. In some cases the rival posts have entered into a mutual agreement to trade only with the Indians they have respectively fitted out; but such treaties, being seldom rigidly adhered to, prove a fertile subject for disputes, and the differences have been more than once decided by force of arms. To carry on the contest, the two Companies are obliged to employ a great many servants, whom they maintain often with much difficulty, and always at a considerable expense.*

There are thirty men belonging to the Hudson's Bay Fort at Cumberland, and nearly as many women and children.

The inhabitants of the North West Company's House are still more numerous.

* As the contending parties have united, the evils mentioned in this and the two preceding pages, are now, in all probability, at an end.

These large families are fed during the greatest part of the year on fish, which are principally procured at Beaver Lake, about fifty miles distant. The fishery commencing with the first frosts in autumn, continues abundant till January, and the produce is dragged over the snow on sledges, each drawn by three dogs, and carrying about two hundred and fifty pounds. The journey to and from the lake occupies five days, and every sledge requires a driver. About three thousand fish, averaging three pounds a piece, were caught by the Hudson's Bay fishermen last season; in addition to which a few sturgeon were occasionally caught in Pine Island Lake; and towards the spring a considerable quantity of moose meat was procured from the Basquiau Hill, sixty or seventy miles distant. The rest of our winter's provision consisted of geese, salted in the autumn, and of dried meats and pemmican, obtained from the provision posts on the plains of the Saskatchewan. A good many potatoes are also raised at this post, and a small supply of tea and

sugar is brought from the dépôt at York Factory. The provisions obtained from these various sources were amply sufficient in the winter of 1819-20; but through improvidence this post has in former seasons been reduced to great straits.

Many of the labourers, and a great majority of the agents and clerks employed by the two Companies, have Indian or half-breed wives, and the mixed offspring thus produced has become extremely numerous.

These métifs, or as the Canadians term them, *bois brulés*, are upon the whole a good looking people, and where the experiment has been made, have shown much aptness in learning, and willingness to be taught; they have, however, been sadly neglected. The example of their fathers has released them from the restraint imposed by the Indian opinions of good and bad behaviour; and generally speaking, no pains have been taken to fill the void with better principles. Hence it is not surprising that the males, trained up in a high opinion of the authority and rights of the Company to which their

fathers belonged, and unacquainted with the laws of the civilized world, should be ready to engage in any measure whatever that they are prompted to believe will forward the interests of the cause they espouse. Nor that the girls, taught a certain degree of refinement by the acquisition of an European language, should be inflamed by the unrestrained discourse of their Indian relations, and very early give up all pretensions to chastity. It is, however, but justice to remark, that there is a very decided difference in the conduct of the children of the Orkney men employed by the Hudson's Bay Company, and those of the Canadian voyagers. Some trouble is occasionally bestowed in teaching the former, and it is not thrown away; but all the good that can be said of the latter is, that they are not quite so licentious as their fathers are.

Many of the half-breeds, both male and female, are brought up amongst, and intermarry with the Indians; and there are few tents wherein the paler children of such marriages are not to be seen. It has been

remarked, I do not know with what truth, that half-breeds show more personal courage than the pure Crees.*

The girls at the forts, particularly the daughters of Canadians, are given in marriage very young, they are very frequently wives at twelve years of age, and mothers at fourteen. Nay, more than one instance came under our observation of the master of a post having permitted a voyager to take to wife a poor child that had scarcely attained the age of ten years. The masters of posts and wintering partners of the Companies deemed this criminal indulgence to the vices of their servants necessary, to stimulate them to exertion for the interest of their respective concerns. Another practice may also

* A singular change takes place in the physical constitution of the Indian females who become inmates of a fort ; namely, they bear children more frequently and longer, but, at the same time, are rendered liable to indurations of the mammæ and prolapsus of the uterus ; evils from which they are, in a great measure, exempt whilst they lead a wandering and laborious life.

be noticed, as showing the state of moral feeling on these subjects amongst the white residents of the fur countries. It was not very uncommon, amongst the Canadian voyagers, for one woman to be common to, and maintained at the joint expense of, two men; nor for a voyager to sell his wife, either for a season or altogether, for a sum of money, proportioned to her beauty and good qualities, but always inferior to the price of a team of dogs.

The country around Cumberland House is flat and swampy, and is much intersected by small lakes. Limestone is found every where under a thin stratum of soil, and it not unfrequently shows itself above the surface. It lies in strata generally horizontal, but in one spot near the fort dipping to the northward at an angle of 40° . Some portions of this rock contain very perfect shells. With respect to the vegetable productions of the district, the *populus tremula*, or aspen, which thrives in moist situations, is perhaps the most abundant tree on the banks of the Saskatchewan, and is much

prized as fire-wood, burning well when cut green. The *populus balsamifera*, or tacamahac, called by the Crees *matheh meteos*, or ugly poplar, in allusion to its rough bark and naked stem, crowned in an aged state with a few distorted branches, is scarcely less plentiful. It is an inferior fire-wood, and does not burn well, unless when cut in the spring, and dried during the summer; but it affords a great quantity of potash. A decoction of its resinous buds has been sometimes used by the Indians with success in cases of *snow-blindness*, but its application to the inflamed eye produces much pain. Of pines, the white spruce is the most common here: the red and black spruce, the balsam of Gilead fir, and Banksian pine, also occur frequently. The larch is found only in swampy spots, and is stunted and unhealthy. The canoe birch attains a considerable size in this latitude, but, from the great demand for its wood to make sledges, it has become rare. The alder abounds on the margin of the little grassy lakes, so common in the neighbourhood. A decoc-

tion of its inner bark is used as an emetic by the Indians, who also extract from it a yellow dye. A great variety of willows occur on the banks of the streams; and the hazel is met with sparingly in the woods. The sugar maple, elm, ash, and the *arbor vitæ*,* termed by the Canadian voyagers *cedar*, grow on various parts of the Saskatchewan; but that river seems to form their northern boundary. Two kinds of prunus also grow here, one of which,† a handsome small tree, produces a black fruit, having a very astringent taste, whence the term *choke-cherry* applied to it. The Crees call it *tanquoy-meena*, and esteemed it to be when dried and bruised a good addition to pemmican. The other species‡ is a less elegant shrub, but is said to bear a bright red cherry, of a pleasant sweet taste. Its Cree name is *passee-awey-meenan*, and it is known to occur as far north as Great Slave Lake.

The most esteemed fruit of the country,

* *Thuya occidentalis*. † *Prunus Virginiana*.

‡ *Prunus Pensylvanica*.

however, is the produce of the *aronia ovalis*. Under the name of *meesasscootoomeena* it is a favourite dish at most of the Indian feasts, and mixed with pemmican, it renders that greasy food actually palatable. A great variety of currants and gooseberries are also mentioned by the natives, under the name of *sappoom-meena*, but we only found three species in the neighbourhood of Cumberland House. The strawberry, called by the Crees *otei-meena*, or heart-berry, is found in abundance; and raspas are common on the sandy banks of the rivers. The fruits hitherto mentioned fall in the autumn, but the following berries remained hanging on the bushes in the spring, and are considered as much mellowed by exposure to the colds in winter. The red whortleberry (*vaccinium vitis idea*) is found everywhere, but is most abundant in rocky places. It is aptly termed by the Crees *neesangum-meena*, sour berry. The common cranberry (*oxycoccus palustris*) is distinguished from the preceding by its growing on moist sphagnous spots, and is hence called *mas-*

kægo-meena, swamp berry. The American guelder rose, whose fruit so strongly resembles the cranberry, is also common. There are two kinds of it, (*viburnum oxycocoos* and *edule*,) one termed by the natives *peepoon-meena*, winter-berry, and the other *mongsoa-meena*, moose-berry. There is also a berry of a bluish white colour, the produce of the white cornel tree, which is named *musqua-meena*, bear-berry, because these animals are said to fatten on it. The dwarf Canadian cornel bears a corymb of red berries, which are highly ornamental to the woods throughout the country, but are not otherwise worthy of notice, for they have an insipid farinaceous taste, and are seldom gathered.

The Crees extract some beautiful colours from several of their native vegetables. They dye their porcupine quills a beautiful scarlet with the roots of two species of bed-straw, (*galium tinctorium* and *boreale*,) which they indiscriminately term *savoyan*. The roots, after being carefully washed, are boiled gently in a clean copper kettle, and

a quantity of the juice of the mooseberry, strawberry, cranberry, or arctic raspberry, is added, together with a few red tufts of pistils of the larch. The porcupine quills are plunged into the liquor before it becomes quite cold, and are soon tinged of a beautiful scarlet. The process sometimes fails, and produces only a dirty brown, a circumstance which ought probably to be ascribed to the use of an undue quantity of acid. They dye black with an ink made of elder bark, and a little bog-iron-ore dried and pounded, and they have various modes of producing yellow. The deepest colour is obtained from the dried root of a plant, which from their description appears to be the cow-bane (*cicuta virosa*). An inferior colour is obtained from the bruised buds of the Dutch myrtle, and they have discovered methods of dyeing with various lichens.

The quadrupeds that are hunted for food in this part of the country are the moose and the rein-deer, the former termed by the Crees *mongsoa*, or *moosoa*, the latter *attek*. The buffalo or bison, (*moostoosh*,) the red-

deer or American stag, (*wawaskeeshoo*), the *apeesee-mongsoos*, or jumping deer, the *kin-waithoos*, or long-tailed deer, and the *apis-tatchækoos*, a species of antelope; animals that frequent the plains above the forks of the Saskatchewan, are not found in the neighbourhood of Cumberland House.

Of fur-bearing animals, various kinds of foxes (*makkeeshewuc*) are found in the district, distinguished by the traders under the names of *black*, *silver*, *cross*, *red*, and *blue* foxes. The two former are considered by the Indians to be the same kind, varying accidentally in the colour of the pelt. The black foxes are very rare, and fetch a high price. The cross and red foxes differ from each other only in colour, being of the same shape and size. Their shades of colour are not disposed in any determinate manner, some individuals approaching in that respect very nearly to the silver fox, others exhibiting every link of the chain down to a nearly uniform deep or orange-yellow, the distinguishing colour of a pure red fox. It is reported both by Indians and traders, that

all the varieties have been found in the same litter. The blue fox is seldom seen here, and is supposed to come from the southward. The gray wolf (*mahaygan*) is common here. In the month of March the females frequently entice the domestic dog from the forts, although at other seasons a strong antipathy seemed to subsist between them. Some black wolves are occasionally seen. The black and red varieties of the American bear (*musquah*) are also found near Cumberland House, though not frequently; a black bear often has red cubs, and *vice versa*. The grizzly bear, so much dreaded by the Indians for its strength and ferocity, inhabits a track of country nearer the Rocky Mountains. It is extraordinary, that although I made inquiries extensively amongst the Indians, I met with but one who said that he had killed a she-bear with young in the womb.

The wolverene, in Cree *okeekoohangees*, or *ommeethatsees*, is an animal of great strength and cunning, and is much hated by the hunters on account of the mischief it

does to their marten-traps. The Canadian lynx (*peeshew*) is a timid but well-armed animal, which preys upon the American hare. Its fur is esteemed. The marten (*wapeestan*) is one of the most common furred animals in the country. The fisher, notwithstanding its name, is an inhabitant of the land, living, like the common marten, principally on mice. It is the *otchæk* of the Crees, and the *pekan* of the Canadians. The mink (*atjackash*) has been often confounded by writers with the fisher. It is a much smaller animal, inhabits the banks of rivers, and swims well; its prey is fish. The otter (*neekeek*) is larger than the English species, and produces a much more valuable fur.

The musk rat (*watsuss* or *musquash*) is very abundant in all the small grassy lakes. They build small conical houses with a mixture of hay and earth; those which build early raising their houses on the mud of the marshes, and those which build later in the season founding their habitations upon the surface of the ice itself. The house covers

a hole in the ice, which permits them to go into the water in search of the roots on which they feed. In severe winters when the small lakes are frozen to the bottom, and these animals cannot procure their usual food, they prey upon each other. In this way great numbers are destroyed.

The beaver (*ammisk*) furnish the staple fur of the country. Many surprising stories have been told of the sagacity with which this animal suits the form of its habitation, retreats, and dam, to local circumstances; and I compared the account of its manners, given by Cuvier in his *Régne Animal*, with the reports of the Indians, and found them to agree exactly. They have been often seen in the act of constructing their houses in the moon-light nights, and the observers agree that the stones, wood, or other materials, are carried in their teeth, and generally leaning against the shoulder. When they have placed it to their mind, they turn round and give it a smart blow with their flat tail. In the act of diving they give a similar stroke to the surface of the water.

They keep their provision of wood under water in front of the house. Their favourite food is the bark of the aspen, birch, and willow; they also eat the alder, but seldom touch any of the pine tribe unless from necessity; they are fond of the large roots of the *nuphar lutea*, and grow fat upon it, but it gives their flesh a strong rancid taste. In the season of love their call resembles a groan, that of the male being the hoarsest, but the voice of the young is exactly like the cry of a child. They are very playful, as the following anecdote will show:—One day a gentleman, long resident in this country, espied five young beavers sporting in the water, leaping upon the trunk of a tree, pushing one another off, and playing a thousand interesting tricks. He approached softly under cover of the bushes, and prepared to fire on the unsuspecting creatures, but a nearer approach discovered to him such a similitude betwixt their gestures and the infantile caresses of his own children, that he threw aside his gun. This gentleman's feelings are to be envied, but few

traders in fur would have acted so feelingly. The musk-rat frequently inhabits the same lodge with the beaver, and the otter also thrusts himself in occasionally ; the latter, however, is not always a civil guest, as he sometimes devours his host.

These are the animals most interesting in an economical point of view. The American hare, and several kinds of grouse and ptarmigan, also contribute towards the support of the natives ; and the geese, in their periodical flights in the spring and autumn, likewise prove a valuable resource both to the Indians and white residents ; but the principal article of food, after the moose-deer, is fish ; indeed, it forms almost the sole support of the traders at some of the posts. The most esteemed fish is the *Coregonus albus*, the *attihhanmeg* of the Crees, and the *white-fish* of the Americans. Its usual weight is between three and four pounds, but it has been known to reach sixteen or eighteen pounds. Three fish of the ordinary size is the daily allowance to each man at the fort, and is considered as

equivalent to two geese, or eight pounds of solid moose-meat. The fishery for the attihhawmeg lasts the whole year, but is most productive in the spawning season, from the middle of September to the middle of October. The *ottonneebees* (*Coregonus Artedi*) closely resembles the last. Three species of carp (*Catastomus Hudsonius*, *C. Forsterianus*, and *C. Lesueurii*) are also found abundantly in all the lakes, their Cree names are *namaypeeth*, *meethquanmay-peeth*, and *wapawhankeeshew*. The *occow*, or river perch, termed also horn-fish, picarel, or doré, is common, but is not so much esteemed as the attihhawmeg. It attains the length of twenty inches in these lakes. The methy is another common fish; it is the *gadus lota*, or turbot, of Europe. Its length is about two feet, its gullet is capacious, and it preys upon fish large enough to distend its body to nearly twice its proper size. It is never eaten, not even by the dogs unless through necessity, but its liver and roe are considered as delicacies.

The pike is also plentiful, and being

readily caught in the winter-time with the hook, is so much prized on that account by the natives, as to receive from them the name of *eithinyoo-cannooshæoo*, or Indian fish. The common trout, or *nammæcous*, grows here to an enormous size, being caught in particular lakes, weighing upwards of sixty pounds; thirty pounds is no uncommon size at Beaver Lake, from whence Cumberland House is supplied. The Hioden clodalis, *oweepeetcheesees*, or gold-eye, is a beautiful small fish, which resembles the trout in its habits.

One of the largest fish is the *mathemegh*, cat-fish, or *barbue*. It belongs to the genus *silurus*. It is rare, but is highly prized as food.

The sturgeon (*accipenser ruthenus*) is also taken in the Saskatchewan, and lakes communicating with it, and furnishes an excellent, but rather rich article of food.

CHAPTER IV.

Leave Cumberland House — Mode of Travelling in Winter—Arrival at Carlton House—Stone Indians —Visit to a Buffalo Pound—Goitres—Departure from Carlton House—Isle à la Crosse—Arrival at Fort Chipewyan.

ON the 18th January we set out from Cumberland House for Carlton House ; but previously to detailing the events of the journey, it may be proper to describe the necessary equipments of a winter traveller in this region, which I cannot do better than by extracting the following brief, but accurate account of it, from Mr. Hood's journal :—

“ A snow-shoe is made of two light bars of wood, fastened together at their extremities, and projected into curves by transverse bars. The side bars have been so shaped by a frame, and dried before a fire, that the front part of the shoe turns up, like the

prow of a boat, and the part behind terminates in an acute angle ; the spaces between the bars are filled up with a fine netting of leathern thongs, except that part behind the main bar, which is occupied by the feet ; the netting is there close and strong, and the foot is attached to the main bar by straps passing round the heel but only fixing the toes, so that the heel rises after each step, and the tail of the shoe is dragged on the snow. Between the main bar and another in front of it, a small space is left, permitting the toes to descend a little in the act of raising the heel to make the step forward, which prevents their extremities from chafing. The length of a snow-shoe is from four to six feet, and the breadth one foot and a half, or one foot and three quarters, being adapted to the size of the wearer. The motion of walking in them is perfectly natural, for one shoe is level with the snow, when the edge of the other is passing over it. It is not easy to use them among bushes, without frequent overthrows, nor to rise afterwards without help. Each shoe weighs

about two pounds when unclogged with snow. The northern Indian snow-shoes differ a little from those of the southern Indians, having a greater curvature on the outside of each shoe; one advantage of which is, that when the foot rises the over-balanced side descends and throws off the snow. All the superiority of European art has been unable to improve the native contrivance of this useful machine.

“ Sledges are made of two or three flat boards, curving upwards in front, and fastened together by transverse pieces of wood above. They are so thin that, if heavily laden, they bend with the inequalities of the surface over which they pass. The ordinary dog-sledges are eight or ten feet long and very narrow, but the lading is secured to a lacing round the edges. The cariole used by the traders is merely a covering of leather for the lower part of the body, affixed to the common sledge, which is painted and ornamented according to the taste of the proprietor. Besides snow-shoes, each individual carries his blanket,

hatchet, steel, flint, and tinder and generally fire arms."

The general dress of the winter traveller is a *capot*, having a hood to put up under the fur cap in windy weather, or in the woods, to keep the snow from his neck; leathern trowsers and Indian stockings which are closed at the ankles, round the upper part of his *mocassins*, or Indian shoes, to prevent the snow from getting into them. Over these he wears a blanket, or leathern coat, which is secured by a belt round his waist, to which his fire-bag, knife, and hatchet are suspended.

Mr. Back and I were accompanied by the seaman, John Hepburn; we were provided with two carioles and two sledges; their drivers and dogs being furnished in equal proportions by the two Companies. Fifteen days' provision so completely filled the sledges, that it was with difficulty we found room for a small sextant, one suit of clothes, and three changes of linen, together with our bedding. Notwithstanding we thus restricted ourselves, and even loaded the ca-

rioles with part of the luggage, instead of embarking in them ourselves, we did not set out without considerable grumbling from the voyagers of both Companies, respecting the overlading of their dogs. However, we left the matter to be settled by our friends at the fort, who were more conversant with winter travelling than ourselves. Indeed the loads appeared to us so great that we should have been inclined to listen to the complaints of the drivers. The weight usually placed upon a sledge, drawn by three dogs, cannot, at the commencement of a journey, be estimated at less than three hundred pounds, which, however, suffers a daily diminution from the consumption of provisions. The sledge itself weighs about thirty pounds. When the snow is hard frozen, or the track well trodden, the rate of travelling is about two miles and a half an hour, including rests, or about fifteen miles a day. If the snow be loose the speed is necessarily much less and the fatigue greater.

At eight in the morning of the 18th, we

quitted the fort, and took leave of our hospitable friend, Governor Williams, whose kindness and attention I shall ever remember with gratitude. Dr. Richardson, Mr. Hood, and Mr. Connolly, accompanied us along the Saskatchewan until the snow became too deep for their walking without snow-shoes. We then parted from our associates, with sincere regret at the prospect of a long separation. Being accompanied by Mr. Mackenzie of the Hudson's Bay Company, who was going to the Isle à la Crosse, with four sledges under his charge, we formed quite a procession, keeping in an Indian file, on the track of the man who preceded the foremost dogs; but, as the snow was deep, we proceeded slowly on the surface of the river, which is about three hundred and fifty yards wide, for the distance of six miles, which we went this day. Its alluvial banks and islands are clothed with willows. At the place of our encampment we could scarcely find sufficient pine branches to floor "the hut," as the Orkney men term the place where tra-

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Drawn by Louis Chalk R. N.

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OF THE WIRELESS INSTITUTE
1884
The purpose of this paper is to describe the manner in which a resonance tuning for a wireless set may be made. It is assumed that the reader is familiar with the principles of resonance and the construction of a wireless set. The first step in making a resonance tuning is to determine the natural frequency of the circuit. This may be done by measuring the period of oscillation of the circuit. The second step is to adjust the capacity of the circuit so that it will resonate at the desired frequency. This may be done by adding or removing capacitors from the circuit. The third step is to adjust the inductance of the circuit so that it will resonate at the desired frequency. This may be done by adding or removing coils from the circuit. The fourth step is to adjust the resistance of the circuit so that it will have a sharp resonance. This may be done by adding or removing resistors from the circuit. The fifth step is to adjust the frequency of the source of the oscillations so that it will be in resonance with the circuit. This may be done by adjusting the frequency of the source. The sixth step is to adjust the amplitude of the oscillations so that they will be of the desired strength. This may be done by adjusting the amplitude of the source. The seventh step is to adjust the phase of the oscillations so that they will be in phase with the source. This may be done by adjusting the phase of the source. The eighth step is to adjust the frequency of the source so that it will be in resonance with the circuit. This may be done by adjusting the frequency of the source. The ninth step is to adjust the amplitude of the oscillations so that they will be of the desired strength. This may be done by adjusting the amplitude of the source. The tenth step is to adjust the phase of the oscillations so that they will be in phase with the source. This may be done by adjusting the phase of the source.



vellers rest. Its preparation, however, consists only in clearing away the snow to the ground, and covering that space with pine branches, over which the parties spread their blankets and coats, and sleep in warmth and comfort, by keeping a good fire at their feet, without any other canopy than the heaven, even though the thermometer should be far below zero.

The arrival at the place of encampment gives immediate occupation to every one of the party; and it is not until the sleeping-place has been arranged, and a sufficiency of wood collected as fuel for the night, that the fire is allowed to be kindled. The dogs alone remain inactive during this busy scene, being kept harnessed to their burdens until the men have leisure to unstow the sledges, and hang upon the trees every species of provision out of their reach. We had ample experience, before morning, of the necessity of this precaution, as they contrived to steal a considerable part of our stores, almost from underneath Hepburn's

head, notwithstanding their having been well fed at supper.

This evening we found the mercury of our thermometer had sunk into the bulb, and was frozen. It rose again into the tube on being held to the fire, but quickly re-descended into the bulb on being removed into the air; we could not, therefore, ascertain by it the temperature of the atmosphere, either then or during our journey. The weather was perfectly clear.

January 19.—We arose this morning after the enjoyment of a sound and comfortable repose, and recommenced our journey at sunrise, but made slow progress through the deep snow. The task of beating the track for the dogs was so very fatiguing, that each of the men took the lead in turn, for an hour and a half. The scenery of the banks of the river improved as we advanced to-day; some firs and poplars were intermixed with the willows. We passed through two creeks, formed by islands, and encamped on a pleasant spot

on the north shore, having only made six miles and three quarters actual distance.

The next day we pursued our course along the river; the dogs had the greatest difficulty in dragging their heavy burdens through the snow. We halted to refresh them at the foot of Sturgeon River, and obtained the latitude $53^{\circ} 51' 41''$ N. This is a small stream, which issues from a neighbouring lake. We encamped near to Musquito Point, having walked about nine miles. The termination of the day's journey was a great relief to me, who had been suffering during the greater part of it, in consequence of my feet having been galled by the snow-shoes; this, however, is an evil which few escape on their initiation to winter travelling. It excites no pity from the more experienced companions of the journey, who travel on as fast as they can, regardless of your pain.

Mr. Isbester and an Orkney man joined us from Cumberland House, and brought some pemmican that we had left behind; a supply which was very seasonable after

our recent loss. The general occupation of Mr. Isbester during the winter, is to follow or find out the Indians, and collect their furs, and his present journey will appear adventurous to persons accustomed to the certainty of travelling on a well-known road. He was going in search of a band of Indians, of whom no information had been received since last October, and his only guide for finding them was their promise to hunt in a certain quarter ; but he looked at the jaunt with indifference, and calculated on meeting them in six or seven days, for which time only he had provision. Few persons in this country suffer more from want of food than those occasionally do who are employed on this service. They are served with a sufficiency of provision to serve until they reached the part where the Indians are expected to be ; but it frequently occurs that, on their arrival at the spot, they have gone elsewhere, and that a recent fall of snow has hidden their track, in which case the voyagers have to wander about in search of them ; and it often hap-

pens, when they succeed in finding the Indians, they are unprovided with meat. Mr. Isbester had been placed in this distressing situation only a few weeks ago, and passed four days without either himself or his dogs tasting food. At length, when he determined on killing one of the dogs to satisfy his hunger, he happily met with a beaten track, which led him to some Indian lodges, where he obtained food.

The morning of the 21st was cold, but pleasant for travelling. We left Mr. Isbester and his companion, and crossed the peninsula of Musquite Point, to avoid a detour of several miles which the river makes. Though we put up at an early hour, we gained eleven miles this day. Our encampment was at the lower extremity of Tobin's Falls. The snow being less deep on the rough ice which enclosed this rapid, we proceeded, on the 22d, at a quicker pace than usual, but at the expense of great suffering to Mr. Back, myself, and Hepburn, whose feet were much galled. After pass-

ing Tobin's Falls, the river expands to the breadth of five hundred yards, and its banks are well wooded with pines, poplars, birch, and willows. Many tracks of moose-deer and wolves were observed near the encampment.

On the 23d the sky was generally overcast, and there were several snow-showers. We saw two wolves and some foxes cross the river in the course of the day, and passed many tracks of the moose and red deer. Soon after we had encamped the snow fell heavily, which was an advantage to us after we had retired to rest, by its affording an additional covering to our blankets. The next morning, at breakfast time, two men arrived from Carlton on their way to Cumberland. Having the benefit of their track, we were enabled, to our great joy, to march at a quick pace without snow-shoes. My only regret was, that the party proceeded too fast to allow of Mr. Back's halting occasionally, to note the bearings of the points, and delineate the

course of the river,* without being left behind. As the provisions were getting short, I could not, therefore, with propriety, check the progress of the party; and, indeed, it appeared to me less necessary, as I understood the river had been carefully surveyed. In the afternoon, we had to resume the incumbrance of the snow-shoes, and to pass over a rugged part where the ice had been piled over a collection of stones. The tracks of animals were very abundant on the river, particularly near the remains of an old establishment, called the Lower Nippéween.

So much snow had fallen on the night of the 24th, that the track we intended to follow was completely covered, and our march to-day was very fatiguing. We passed the remains of two red-deer, lying at the bases of perpendicular cliffs, from the summits of which they had, probably, been forced by the wolves. These voracious animals, who

* This was afterwards done by Dr. Richardson during a voyage to Carlton in the spring.

are inferior in speed to the moose or red-deer, are said frequently to have recourse to this expedient in places where extensive plains are bounded by precipitous cliffs. Whilst the deer are quietly grazing, the wolves assemble in great numbers, and, forming a crescent, creep slowly towards the herd so as not to alarm them much at first, but when they perceive that they have fairly hemmed in the unsuspecting creatures, and cut off their retreat across the plain, they move more quickly and with hideous yells terrify their prey and urge them to flight by the only open way, which is that towards the precipice; appearing to know that when the herd is once at full speed, it is easily driven over the cliff, the rearmost urging on those that are before. The wolves then descend at their leisure, and feast on the mangled carcasses. One of these animals passed close to the person who was beating the track, but did not offer any violence. We encamped at sunset, after walking thirteen miles.

On the 26th, we were rejoiced at passing

the half-way point, between Cumberland and Carlton. The scenery of the river is less pleasing beyond this point, as there is a scarcity of wood. One of our men was despatched after a red-deer that appeared on the bank. He contrived to approach near enough to fire twice, though without success, before the animal moved away. After a fatiguing march of seventeen miles we put up at the upper Nippéween, a deserted establishment; and performed the comfortable operations of shaving and washing for the first time since our departure from Cumberland, the weather having been hitherto too severe. We passed an uncomfortable and sleepless night, and agreed next morning to encamp in future, in the open air, as preferable to the imperfect shelter of a deserted house without doors or windows.

The morning was extremely cold, but fortunately the wind was light, which prevented our feeling it severely; experience indeed had taught us that the sensation of cold depends less upon the state of

temperature, than the force of the wind. An attempt was made to obtain the latitude, which failed, in consequence of the screw, that adjusts the telescope of the sextant, being immoveably fixed, from the moisture upon it having frozen. The instrument could not be replaced in its case before the ice was thawed by the fire in the evening.

In the course of the day we passed the confluence of the south branch of the Saskatchewan, which rises from the Rocky Mountains near the sources of the northern branch of the Missouri. At Coles Falls, which commence a short distance from the branch, we found the surface of the ice very uneven, and many spots of open water.

We passed the ruins of an establishment, which the traders had been compelled to abandon, in consequence of the intractable conduct and pilfering habits of the Assiniboine or Stone Indians; and we learned that all the residents at a post on the south branch, had been cut off by the same tribe

some years ago. We travelled twelve miles to-day. The wolves serenaded us through the night with a chorus of their agreeable howling, but none of them ventured near the encampment. But Mr. Back's repose was disturbed by a more serious evil; his buffalo robe caught fire, and the shoes on his feet, being contracted by the heat, gave him such pain, that he jumped up in the cold, and ran into the snow as the only means of obtaining relief.

On the 28th we had a strong and piercing wind from N.W. in our faces, and much snow-drift; we were compelled to walk as quick as we could, and to keep constantly rubbing the exposed parts of the skin, to prevent their being frozen, but some of the party suffered in spite of every precaution. We descried three red-deer on the banks of the river, and were about to send the best marksmen after them, when they espied the party, and ran away. A supply of meat would have been very seasonable, as the men's provision had become scanty, and the dogs were without food, except a little

burnt leather. Owing to the scarcity of wood, we had to walk until a late hour, before a good spot for an encampment could be found, and had then attained only eleven miles. The night was miserably cold; our tea froze in the tin pots before we could drink it, and even a mixture of spirits and water became quite thick by congelation; yet, after we lay down to rest, we felt no inconvenience, and heeded not the wolves, though they were howling within view.

The 29th was also very cold, until the sun burst forth, when the travelling became pleasant. The banks of the river are very scantily supplied with wood through the part we passed to-day. A long track on the south shore, called Holms Plains, is destitute of any thing like a tree, and the opposite bank has only stunted willows; but, after walking sixteen miles, we came to a spot better wooded, and encamped opposite to a remarkable place, called by the voyagers "The Neck of Land."

A short distance below our encampment,

on the peninsula formed by the confluence of the Net-setting river with the Saskatchewan, there stands a representation of Kepoochikawn, which was formerly held in high veneration by the Indians and is still looked upon with some respect. It is merely a large willow bush, having its tops bound into a bunch. Many offerings of value, such as handsome dresses, hatchets, and kettles, used to be made to it, but of late its votaries have been less liberal. It was mentioned to us as a signal instance of its power, that a sacrilegious moose-deer having ventured to crop a few of its tender twigs was found dead at the distance of a few yards. The bush having now grown old and stunted is exempted from similar violations.

On the 30th we directed our course round the Neck of Land, which is well clothed with pines and firs, though the opposite or western bank is nearly destitute of wood. This contrast between the two banks continued until we reached the commencement of what our companions called the Barren

Grounds, when both the banks were alike bare. Vast plains extend behind the southern bank, which afford excellent pasturage for the buffalo, and other grazing animals. In the evening we saw a herd of the former, but could not get near to them. After walking fifteen miles we encamped. The men's provision having been entirely expended last night, we shared our small stock with them. The poor dogs had been toiling some days on the most scanty fare; their rapacity, in consequence, was unbounded; they forced open a deal box containing tea, &c., to get at a small piece of meat which had been incautiously placed in it.

As soon as daylight permitted, the party commenced their march in expectation of reaching Carlton House to breakfast, but we did not arrive before noon, although the track was good. We were received by Mr. Prudens, the gentleman in charge of the post, with that friendly attention which Governor Williams's circular was calculated to ensure at every station; and were soon

afterwards regaled with a substantial dish of buffalo steaks, which would have been excellent under any circumstances, but were particularly relished by us, after our travelling fare of dried meat and pemmican, though eaten without either bread or vegetables. After this repast, we had the comfort of changing our travelling dresses, which had been worn for fourteen days; a gratification which can only be truly estimated by those who have been placed under similar circumstances. I was still in too great pain from swellings in the ankles to proceed to La Montée, the North-West Company's establishment, distant about three miles; but Mr. Hallet, the gentleman in charge, came the following morning, and I presented to him the circular from Mr. S. Mac Gillivray. He had already been furnished, however, with a copy of it from Mr. Connolly, and was quite prepared to assist us in our advance to the Athabasca.

Mr. Back and I having been very desirous to see some of the Stone Indians, who reside on the plains in this vicinity, learned

with regret that a large band of them had left the house on the preceding day; but our curiosity was amply gratified by the appearance of some individuals, on the following and every subsequent day during our stay.

The looks of these people would have prepossessed me in their favour, but for the assurances I had received from the gentlemen of the posts, of their gross and habitual treachery. Their countenances are affable and pleasing, their eyes large and expressive, nose aquiline, teeth white and regular, the forehead bold, the cheek-bones rather high. Their figure is usually good, above the middle size, with slender, but well proportioned limbs. Their colour is a light copper, and they have a profusion of very black hair, which hangs over the ears, and shades the face. Their dress, which I think extremely neat and convenient, consists of a vest and trowsers of leather fitted to the body; over these a buffalo robe is thrown gracefully. These dresses are in general cleaned with *white-mud*, a sort of marl,

though some use *red earth*, a kind of bog-iron-ore; but this colour neither looks so light, nor forms such an agreeable contrast as the white with the black hair of the robe. Their quiver hangs behind them, and in the hand is carried the bow, with an arrow, always ready for attack or defence, and sometimes they have a gun; they also carry a bag containing materials for making a fire, some tobacco, the calumet or pipe, and whatever valuables they possess. This bag is neatly ornamented with porcupine quills. Thus equipped, the Stone Indian bears himself with an air of perfect independence.

The only articles of European commerce they require in exchange for the meat they furnish to the trading post, are tobacco, knives, ammunition, and spirits, and occasionally some beads, but more frequently buttons, which they string in their hair as ornaments. A successful hunter will probably have two or three dozen of them hanging at equal distances on locks of hair, from each side of the forehead. At the end of these locks small coral bells are

sometimes attached, which tingle at every motion of the head, a noise which seems greatly to delight the wearer; sometimes strings of buttons are bound round the head like a tiara; and a bunch of feathers gracefully crowns the head.

The Stone Indians steal whatever they can, particularly horses; these animals they maintain are common property, sent by the Almighty for the general use of man, and therefore may be taken wherever met with; still they admit the right of the owners to watch them, and to prevent theft if possible. This avowed disposition on their part calls forth the strictest vigilance at the different posts; notwithstanding which the most daring attacks are often made with success, sometimes on parties of three or four, but oftener on individuals. About two years ago a band of them had the audacity to attempt to take away some horses which were grazing before the gate of the North-West Company's fort; and, after braving the fire from the few people then at the establishment through the whole day, and

returning their shots occasionally, they actually succeeded in their enterprise. One man was killed on each side. They usually strip defenceless persons whom they meet of all their garments, but particularly of those which have buttons, and leave them to travel home in that state, however severe the weather. If resistance be expected, they not unfrequently murder before they attempt to rob. The traders, when they travel, invariably keep some men on guard to prevent surprise, whilst the others sleep; and often practise the stratagem of lighting a fire at sunset, which they leave burning, and move on after dark to a more distant encampment—yet these precautions do not always baffle the depredators. Such is the description of men whom the traders of this river have constantly to guard against. It must require a long residence among them, and much experience of their manners, to overcome the apprehensions their hostility and threats are calculated to excite. Through fear of having their provision and supplies entirely cut off, the traders are

often obliged to overlook the grossest offences, even murder, though the delinquents present themselves with unblushing effrontery almost immediately after the fact, and perhaps boast of it. They do not, on detection, consider themselves under any obligation to deliver up what they have stolen without receiving an equivalent.

The Stone Indians keep in amity with their neighbours the Crees from motives of interest; and the two tribes unite in determined hostility against the nations dwelling to the westward, which are generally called Slave Indians—a term of reproach applied by the Crees to those tribes against whom they have waged successful wars. The Slave Indians are said greatly to resemble the Stone Indians, being equally desperate and daring in their acts of aggression and dishonesty towards the traders.

These parties go to war almost every summer, and sometimes muster three or four hundred horsemen on each side. Their leaders, in approaching the foe, exercise all the caution of the most skilful generals;

and whenever either party considers that it has gained the best ground, or finds it can surprise the other, the attack is made. They advance at once to close quarters, and the slaughter is consequently great, though the battle may be short. The prisoners of either sex are seldom spared, but slain on the spot with wanton cruelty. The dead are scalped, and he is considered the bravest person who bears the greatest number of scalps from the field. These are afterwards attached to his war dress, and worn as proofs of his prowess. The victorious party, during a certain time, blacken their faces and every part of their dress in token of joy, and in that state they often come to the establishment, if near, to testify their delight by dancing and singing, bearing all the horrid insignia of war, to display their individual feats. When in mourning they completely cover their dress and hair with white mud.

The Crees in the vicinity of Carlton House have the same cast of countenance as those about Cumberland, but are much

superior to them in appearance, living in a more abundant country. These men are more docile, tractable, and industrious, than the Stone Indians, and bring greater supplies of provision and furs to the posts. Their general mode of dress resembles that of the Stone Indians; but sometimes they wear cloth leggins, blankets, and other useful articles, when they can afford to purchase them. They also decorate their hair with buttons.

The Crees procure guns from the traders, and use them in preference to the bow and arrow; and from them the Stone Indians often get supplied, either by stealth, gaming, or traffic. Like the rest of their nation, these Crees are remarkably fond of spirits, and would make any sacrifice to obtain them. I regretted to find the demand for this pernicious article had greatly increased within the few last years. The following notice of these Indians is extracted from Dr. Richardson's Journal:—

“ The Asseenaboine, termed by the Crees Asseeneepoytuck, or Stone Indians, are a

tribe of Sioux, who speak a dialect of the Iroquois, one of the great divisions under which the American philologists have classed the known dialects of the Aborigines of North America. The Stone Indians, or as they name themselves, *Eascab*, originally entered this part of the country under the protection of the Crees, and in concert with them attacked and drove to the westward the former inhabitants of the banks of the Saskatchewan. They are still the allies of the Crees, but have now become more numerous than their former protectors. They exhibit all the bad qualities ascribed to the Mengwe or Iroquois, the stock whence they are sprung. Of their actual number I could obtain no precise information, but it is very great. The Crees who inhabit the plains, being fur hunters, are better known to the traders.

“ They are divided into two distinct bands, the Ammisk-watcheéthinyoowuc, or Beaver Hill Crees, who have about forty tents, and the Sackaweé-thinyoowuc, or Thick Wood Crees, who have thirty-five.

The tents average nearly ten inmates each, which gives a population of seven hundred and fifty to the whole.

“ The nations who were driven to the westward by the Eascab and Crees are termed, in general, by the latter, Yatchéethinyoowuc, which has been translated Slave Indians, but more properly signifies Strangers.

“ They now inhabit the country around Fort Augustus and towards the foot of the Rocky Mountains, and have increased in strength until they have become an object of terror to the Eascab themselves. They rear a great number of horses, make use of fire-arms, and are fond of European articles; in order to purchase which they hunt the beaver and other furred animals, but they depend principally on the buffalo for subsistence.

“ They are divided into five nations:— First, the Pawäustic-eythin-yoowuc, or Fall Indians, so named from their former residence on the falls of the Saskatchewan. They are the Minetarres, with whom Captain Lewis’s party had a conflict on their

return from the Missouri. They have about four hundred and fifty or five hundred tents; their language is very guttural and difficult.

“ Second, the Peganoo-eythinyoowuc Pegans, or Muddy River Indians, named in their own language Pegancœ'-koon, have four hundred tents.

“ Third, the Meethco-thinyoowuc, or Blood Indians, named by themselves Kaincœ'-koon, have three hundred tents.

“ Fourth, the Cuskœteh-waw-thésseetuck, or Blackfoot Indians, in their own language Saxœ-kœ-koon, have three hundred and fifty tents.

“ The last three nations, or tribes, the Pegans, Blood Indians, and Black-feet, speak the same language. It is pronounced in a slow and distinct tone, has much softness, and is easily acquired by their neighbours. I am assured by the best interpreters in the country, that it bears no affinity to the Cree, Sioux, or Chipewyan languages.

“ Lastly, the Sassees, or Circees, have

one hundred and fifty tents ; they speak the same language with their neighbours, the Snare Indians, who are a tribe of the extensive family of the Chipewyans.*

On the 6th of February, we accompanied Mr. Prudens on a visit to a Cree encamp-

* " As the subjects may be interesting to philologists, I subjoin a few words of the Blackfoot language :—

Peestâh kan,	tobacco.
Moohksee,	an awl.
Nappœ-ôôhkee,	rum.
Cook keet,	give me.
Eeninee,	buffalo.
Pooxâpoot,	come here.
Kat cetsits,	none, I have none.
Keet stâ kee,	a beaver.
Naum',	a bow.
Stoo-an,	a knife.
Sassoopats,	ammunition.
Meenee,	beads.
Poommees,	fat.
Miss ta poot,	keep off.
Saw,	no.
Stwee,	cold ; it is cold.
Pennākōmit,	a horse.
Ahseeu,	good."

ment and a buffalo pound, about six miles from the house; we found seven tents pitched within a small cluster of pines, which adjoined the pound. The largest, which we entered, belonged to the chief, who was absent, but came in on learning our arrival. The old man (about sixty) welcomed us with a hearty shake of the hand, and the customary salutation of "What cheer!" an expression which they have gained from the traders. As we had been expected, they had caused the tent to be neatly arranged, fresh grass was spread on the ground, buffalo robes were placed on the side opposite the door for us to sit on, and a kettle was on the fire to boil meat for us.

After a few minutes' conversation, an invitation was given to the chief and his hunters to smoke the calumet with us as a token of our friendship: this was loudly announced through the camp, and ten men from the other tents immediately joined our party. On their entrance the women and children withdrew, their presence on such

occasions being contrary to etiquette. The calumet having been prepared and lighted by Mr. Prudens's clerk, was presented to the chief, who performed the following ceremony before he commenced smoking : —He first pointed the stem to the south, then to the west, north, and east, and afterwards to the heavens, the earth, and the fire, as an offering to the presiding spirits ; —he took three whiffs only, and then passed the pipe to his next companion, who took the same number of whiffs, and so did each person as it went round. After the calumet had been replenished, the person who then commenced repeated only the latter part of the ceremony, pointing the stem to the heavens, the earth, and the fire. Some spirits, mixed with water, were presented to the old man, who, before he drank, demanded a feather, which he dipped into the cup several times, and sprinkled the moisture on the ground, pronouncing each time a prayer. His first address to the Keetchee Manitou, or Great Spirit, was, that buffalo might be abundant every

where, and that plenty might come into their pound. He next prayed that the other animals might be numerous, and particularly those which were valuable for their furs, and then implored that the party present might escape the sickness which was at that time prevalent, and be blessed with constant health. Some other supplications followed, which we could not get interpreted without interrupting the whole proceeding; but, at every close, the whole Indian party assented by exclaiming Aha; and when he had finished, the old man drank a little and passed the cup round. After these ceremonies each person smoked at his leisure, and they engaged in a general conversation, which I regretted not understanding, as it seemed to be very humorous, exciting frequent bursts of laughter. The younger men, in particular, appeared to ridicule the abstinence of one of the party, who neither drank nor smoked. He bore their jeering with perfect composure, and assured them, as I was told, they would be better if they would follow his example. I was

happy to learn from Mr. Prudens, that this man was not only one of the best hunters, but the most cheerful and contented of the tribe.

Four Stone Indians arrived at this time and were invited into the tent, but one only accepted the invitation and partook of the fare. When Mr. Prudens heard the others refuse, he gave immediate directions that our horses should be narrowly watched, as he suspected these fellows wished to carry them off. Having learned that these Crees considered Mr. Back and myself to be war chiefs, possessing great power, and that they expected we should make some address to them, I desired them to be kind to the traders, to be industrious in procuring them provision and furs, and to refrain from stealing their stores and horses; and I assured them, that if I heard of their continuing to behave kindly, I would mention their good conduct in the strongest terms to their Great Father across the sea, (by which appellation they designate the King,) whose favourable consideration they had

been taught by the traders to value most highly.

They all promised to follow my advice, and assured me it was not they, but the Stone Indians, who robbed and annoyed the traders. The Stone Indian who was present heard this accusation against his tribe quite unmoved, but he probably did not understand the whole of the communication. We left them to finish their rum, and went to look round the lodges, and examine the pound.

The greatest proportion of labour in savage life falls to the women; we now saw them employed in dressing skins, and conveying wood, water, and provision. As they have often to fetch the meat from some distance, they are assisted in this duty by their dogs, which are not harnessed in sledges, but carry their burthens in a manner peculiarly adapted to this level country. Two long poles are fastened by a collar to the dog's neck; their ends trail on the ground, and are kept at a proper distance by a hoop, which is lashed between

them, immediately behind the dog's tail; the hoop is covered with network, upon which the load is placed.

The boys were amusing themselves by shooting arrows at a mark, and thus training to become hunters. The Stone Indians are so expert with the bow and arrow, that they can strike a very small object at a considerable distance, and will shoot with sufficient force to pierce through the body of a buffalo when near.

The buffalo pound was a fenced circular space of about a hundred yards in diameter; the entrance was banked up with snow, to a sufficient height to prevent the retreat of the animals that once have entered. For about a mile on each side of the road leading to the pound, stakes were driven into the ground at nearly equal distances of about twenty yards; these were intended to represent men, and to deter the animals from attempting to break out on either side. Within fifty or sixty yards from the pound, branches of trees were placed between these stakes to screen the Indians, who lie down

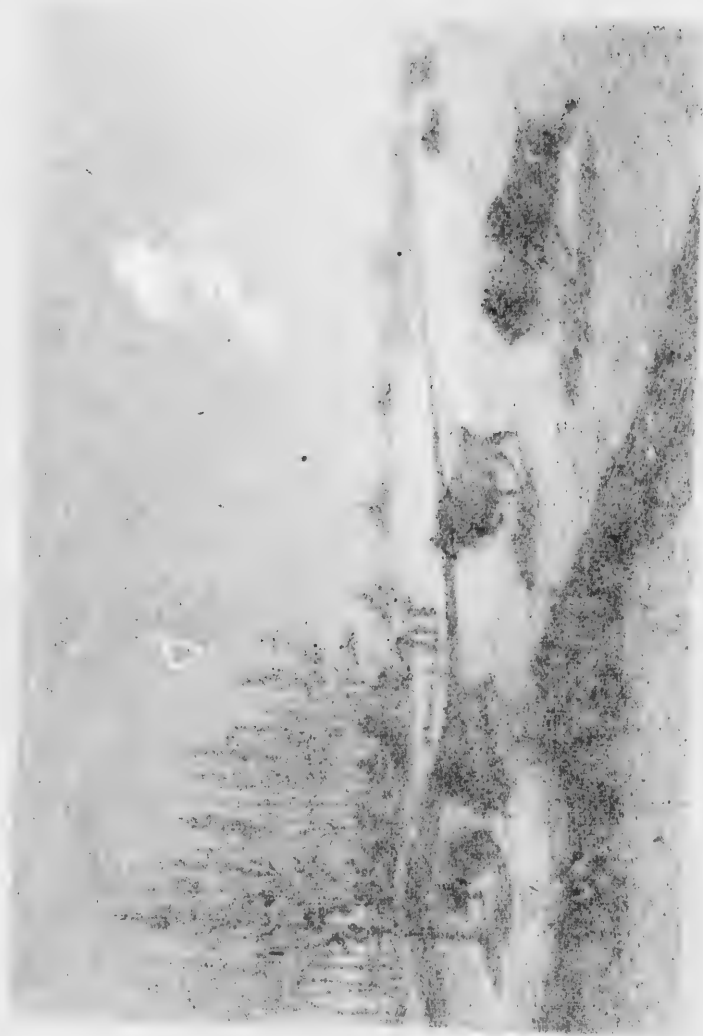
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behind them to await the approach of the buffalo.

The principal dexterity in this species of chase is shown by the horsemen, who have to manœuvre round the herd in the plains so as to urge them to enter the roadway, which is about a quarter of a mile broad. When this has been accomplished, they raise loud shouts, and, pressing close upon the animals, so terrify them that they rush heedlessly forward towards the snare. When they have advanced as far as the men who are lying in ambush, they also rise, and increase the consternation by violent shooting and firing guns. The affrighted beasts having no alternative, run directly to the pound, where they are quickly despatched, either with an arrow or gun.

There was a tree in the centre of the pound, on which the Indians had hung strips of buffalo flesh, and pieces of cloth, as tributary or grateful offerings to the Great Master of Life; and we were told that they occasionally place a man in the tree to sing to the presiding spirit as the

buffaloes are advancing, who must keep his station until the whole that have entered are killed. This species of hunting is very similar to that of taking elephants on the island of Ceylon, but upon a smaller scale.

The Crees complained to us of the audacity of a party of Stone Indians, who, two nights before, had stripped their revered tree of many of its offerings, and had injured their pound by setting the stakes out of their proper places.

Other modes of killing the buffalo are practised by the Indians with success; of these the hunting them on horseback requires most dexterity. An expert hunter, when well mounted, dashes at the herd, and chooses an individual which he endeavours to separate from the rest. If he succeeds, he contrives to keep him apart by the proper management of his horse, though going at full speed. Whenever he can get sufficiently near for a ball to penetrate the beast's hide, he fires, and seldom fails of bringing the animal down; though of course he cannot rest the piece against the shoulder,

nor take a deliberate aim. On this service the hunter is often exposed to considerable danger, from the fall of his horse in the numerous holes which the badgers make in these plains, and also from the rage of the buffalo, which, when closely pressed, often turns suddenly, and, rushing furiously on the horse, frequently succeeds in wounding it, or dismounting the rider. Whenever the animal shows this disposition, which the experienced hunter will readily perceive, he immediately pulls up his horse, and goes off in another direction.

When the buffaloes are on their guard, horses cannot be used in approaching them; but the hunter dismounts at some distance, and crawls in the snow towards the herd, pushing his gun before him. If the buffaloes happen to look towards him, he stops, and keeps quite motionless, until their eyes are turned in another direction; by this cautious proceeding a skilful person will get so near as to be able to kill two or three out of the herd. It will easily be imagined this service cannot be very agree-

able when the thermometer stands 30° or 40° below zero, as sometimes happens in this country.

As we were returning from the tents, the dogs that were harnessed to three sledges, in one of which Mr. Back was seated, set off in pursuit of a buffalo-calf. Mr. Back was speedily thrown from his vehicle, and had to join me in my horse-cariole. Mr. Heriot, having gone to recover the dogs, found them lying exhausted beside the calf, which they had baited until it was as exhausted as themselves. Mr. Heriot, to show us the mode of hunting on horseback, or, as the traders term it, running of the buffalo, went in chase of a cow, and killed it after firing three shots.

The buffalo is a huge and shapeless animal, quite devoid of grace or beauty; particularly awkward in running, but by no means slow; when put to his speed, he plunges through the deep snow very expeditiously; the hair is dark brown, very shaggy, curling about the head, neck, and hump, and almost covering the eye, particularly in the bull, which is larger and

more unsightly than the cow. The most esteemed part of the animal is the hump, called by the Canadians *bos*, by the Hudson's Bay people the *wig*; it is merely a strong muscle, on which nature at certain seasons forms a considerable quantity of fat. It is attached to the long spinous processes of the first dorsal vertebræ, and seems to be destined to support the enormous head of the animal. The meat which covers the spinal processes themselves, after the wig is removed, is next in esteem for its flavour and juiciness, and is more exclusively termed the hump by the hunters.

The party was prevented from visiting a Stone Indian encampment by a heavy fall of snow, which made it impracticable to go and return the same day. We were dissuaded from sleeping at their tents by the interpreter at the N.W. post, who told us they considered the hooping-cough and measles, under which they were now suffering, to have been introduced by some white people recently arrived in the country, and that he feared those who had lost

relatives, imagining we were the persons, might vent their revenge on us. We regretted to learn that these diseases had been so very destructive among the tribes along the Saskatchewan, as to have carried off about three hundred persons, Crees and Asseenaboines, within the trading circle of these establishments. The interpreter also informed us of another bad trait peculiar to the Stone Indians. Though they receive a visitor kindly at their tents, and treat him very hospitably during his stay, yet it is very probable they will despatch some young men to way-lay and rob him in going towards the post: indeed, all the traders assured us it was more necessary to be vigilantly on our guard on the occasion of a visit to them, than at any other time.

Carlton House, (which our observations place in latitude $52^{\circ} 50' 47''$ N., longitude, $106^{\circ} 12' 42''$ W., variation $20^{\circ} 44' 47''$ E.) is pleasantly situated about a quarter of a mile from the river's side on the flat ground under the shelter of the high banks that bound the plains. The land is fertile, and

persons, We re- es had e tribes carried es and circle of ter also ular to eceive a eat him et it is h some in going traders y to be ion of a e. rations ngitude, 47" E.) er of a ground ks that ile, and produces, with little trouble, ample returns of wheat, barley, oats, and potatoes. The ground is prepared for the reception of these vegetables, about the middle of April, and when Dr. Richardson visited this place on May 10th, the blade of wheat looked strong and healthy. There were only five acres in cultivation at the period of my visit. The prospect from the fort must be pretty in summer, owing to the luxuriant verdure of this fertile soil; but in the uniform and cheerless garb of winter, it has little to gratify the eye.

Beyond the steep bank behind the house, commences the vast plain, whose boundaries are but imperfectly known; it extends along the south branch of the Saskatchewan, and towards the sources of the Missouri and Asseenaboine rivers, being scarcely interrupted through the whole of this great space by hills, or even rising grounds. The excellent pasturage furnishes food in abundance to a variety of grazing animals, of which the buffalo, red-deer, and a species of antelope, are the most important. Their

presence naturally attracts great hordes of wolves, which are of two kinds, the large, and the small. Many bears prowl about the banks of this river in summer ; of these the grizzle bear is the most ferocious, and is held in dread both by Indians and Europeans. The traveller, in crossing these plains, not only suffers from the want of food and water, but is also exposed to hazard from his horse stumbling in the numerous badger-holes. In many large districts, the only fuel is the dried dung of the buffalo ; and when a thirsty traveller reaches a spring, he has not unfrequently the mortification to find the water salt.

Carlton House, and La Montée, are provision-posts, only an inconsiderable quantity of furs being obtained at either of them. The provisions are procured in the winter season from the Indians, in the form of dried meat and fat, and when converted by mixture into pemmican, furnish the principal support of the voyagers, in their passages to and from the dépôts in summer. A considerable quantity of it is also kept

for winter use, at most of the fur-posts, as the least bulky article that can be taken on a winter journey. The mode of making pemmican is very simple; the meat is dried by the Indians in the sun, or over a fire, and pounded by beating it with stones when spread on a skin. In this state it is brought to the forts, where the admixture of hair is partially sifted out, and a third part of melted fat incorporated with it, partly by turning the two over with a wooden shovel, partly by kneading them together with the hands. The pemmican is then firmly pressed into leathern bags, each capable of containing eighty-five pounds, and being placed in an airy place to cool, is fit for use. It keeps in this state, if not allowed to get wet, very well for one year, and with great care it may be preserved good for two. Between three and four hundred bags were made here by each of the Companies this year.

There were eight men, besides Mr. Prudens and his clerk, belonging to Carlton House. At La Montée there were seventy

Canadians and half-breeds, and sixty women and children, who consumed upwards of seven hundred pounds of buffalo meat daily, the allowance per diem for each man being eight pounds: a portion not so extravagant as may at first appear, when allowance is made for bone, and the entire want of farinaceous food or vegetables.

There are other provision posts, Fort Augustus and Edmonton, farther up the river, from whence some furs are also procured. The Stone Indians have threatened to cut off the supplies in going up to these establishments, to prevent their enemies from obtaining ammunition, and other European articles; but as these menaces have been frequently made without being put in execution, the traders now hear them without any great alarm, though they take every precaution to prevent being surprised. Mr. Back and I were present when an old Cree communicated to Mr. Prudens, that the Indians spoke of killing all the white people in that vicinity this year, which information he received with perfect composure, and

was amused, as well as ourselves, with the man's judicious remark which immediately followed, "a pretty state we shall then be in without the goods you bring us."

The following remarks on a well-known disease are extracted from Dr. Richardson's Journal:—

"Bronchocele, or Goitre, is a common disorder at Edmonton. I examined several of the individuals afflicted with it, and endeavoured to obtain every information on the subject from the most authentic sources. The following facts may be depended upon. The disorder attacks those only who drink the water of the river. It is indeed in its worst state confined almost entirely to the half-breed women and children, who reside constantly at the fort, and make use of river water, drawn in the winter through a hole cut in the ice. The men, being often from home on journeys through the plain, when their drink is melted snow, are less affected; and, if any of them exhibit during the winter, some incipient symptoms of the complaint, the annual summer voyage to

the sea-coast generally effects a cure. The natives who confine themselves to snow water in the winter, and drink of the small rivulets which flow through the plains in the summer, are exempt from the attacks of this disease.

“ These facts are curious, inasmuch as they militate against the generally-received opinion that the disease is caused by drinking snow-water; an opinion which seems to have originated from bronchocele being endemial to subalpine districts.

“ The Saskatchewan, at Edmonton, is clear in the winter, and also in the summer, except during the May and July floods. The distance from the Rocky Mountains (which I suppose to be of primitive formation,) is upwards of one hundred and thirty miles. The neighbouring plains are alluvial, the soil is calcareous, and contains numerous travelled fragments of limestone. At a considerable distance below Edmonton, the river, continuing its course through the plains, becomes turbid, and acquires a white colour. In this state it is drunk by the inmates of Carlton House, where the

disease is known only by name. It is said that the inhabitants of Rocky Mountain House, sixty miles nearer the source of the river, are more severely affected than those at Edmonton. The same disease occurs near the sources of the Elk and Peace Rivers; but, in those parts of the country which are distant from the Rocky Mountain Chain, it is unknown, although melted snow forms the only drink of the natives for nine months of the year.

“ A residence of a single year at Edmonton is sufficient to render a family bronchocelous. Many of the goitres acquire great size. Burnt sponge has been tried, and found to remove the disease, but an exposure to the same cause immediately reproduces it.

“ A great proportion of the children of women who have goitres, are born idiots, with large heads, and the other distinguishing marks of *cretins*. I could not learn whether it was necessary that both parents should have goitres, to produce cretin children; indeed the want of chastity in the

half-breed women would be a bar to the deduction of any inference on this head."

February 8.—Having recovered from the swellings and pains which our late march from Cumberland had occasioned, we prepared for the commencement of our journey to Isle à la Crosse, and requisitions were made on both the establishments for the means of conveyance, and the necessary supply of provisions for the party, which were readily furnished. On the 9th the carioles and sledges were loaded, and sent off after breakfast; but Mr. Back and I remained till the afternoon, as Mr. Prudens had offered that his horses should convey us to the encampment. At 3 P.M. we parted from our kind host, and in passing through the gate were honoured with a salute of musketry. After riding six miles, we joined the men at their encampment, which was made under the shelter of a few poplars. The dogs had been so much fatigued in wading through the very deep snow with their heavy burdens, having to drag upwards of ninety pounds' weight each,

that they could get no farther. Soon after our arrival, the snow began to fall heavily, and it continued through the greater part of the night.

Our next day's march was therefore particularly tedious, the snow being deep, and the route lying across an unvarying level, destitute of wood, except one small cluster of willows. In the afternoon we reached the end of the plain, and came to an elevation, on which poplars, willows, and some pines grew, where we encamped; having travelled ten miles. We crossed three small lakes, two of fresh water and one of salt, near the latter of which we encamped, and were, in consequence, obliged to use for our tea, water made from snow, which has always a disagreeable taste.

We had scarcely ascended the hill on the following morning, when a large herd of red-deer was perceived grazing at a little distance; and, though we were amply supplied with provision, our Canadian companions could not resist the temptation of endeavouring to add to our stock. A half-

breed hunter was therefore sent after them. He succeeded in wounding one, but not so as to prevent its running off with the herd in a direction wide of our course. A couple of rabbits, and a brace of wood partridges, were shot in the afternoon. There was an agreeable variety of hill and dale in the scenery we passed through to-day; and sufficient wood for ornament, but not enough to crowd the picture. The valleys were intersected by several small lakes and pools, whose snowy covering was happily contrasted with the dark green of the pine-trees which surrounded them. After ascending a moderately high hill by a winding path through a close wood, we opened suddenly upon Lake Iroquois, and had a full view of its picturesque shores. We crossed it and encamped.

Though the sky was cloudless, yet the weather was warm. We had the gratification of finding a beaten track soon after we started on the morning of the 12th, and were thus enabled to walk briskly. We crossed at least twenty hills, and found a

small lake or pool at the foot of each. The destructive ravages of fire were visible during the greater part of the day. The only wood we saw for miles together consisted of pine-trees stript of their branches and bark by this element, in other parts poplars alone were growing, which we have remarked invariably to succeed the pine after a conflagration. We walked twenty miles to day, but the direct distance was only sixteen.

The remains of an Indian hut were found in a deep glen, and close to it was placed a pile of wood, which our companions supposed to cover a deposit of provision. Our Canadian voyagers, induced by their insatiable desire of procuring food, proceeded to remove the upper pieces, and examine its contents; when, to their surprise, they found the body of a female, clothed in leather, which appeared to have been recently placed there. Her former garments, the materials for making a fire, a fishing-line, a hatchet, and a bark dish, were laid beside the corpse. The wood was carefully re-



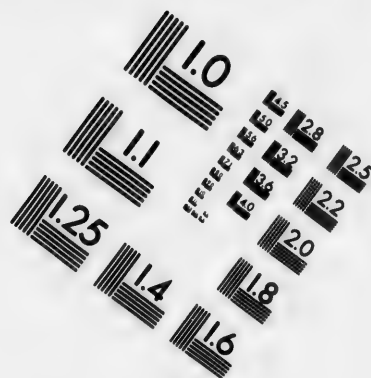
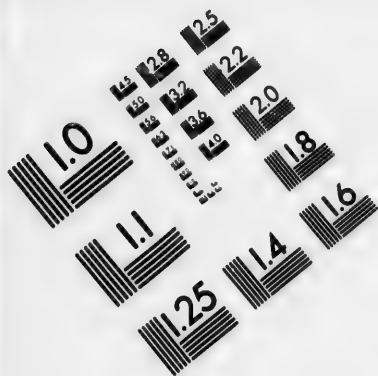
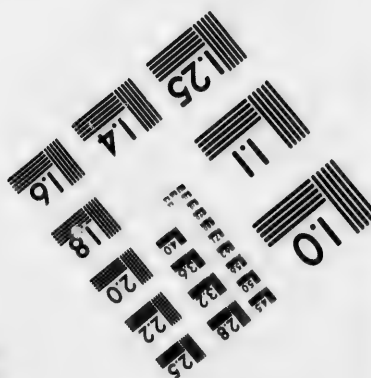
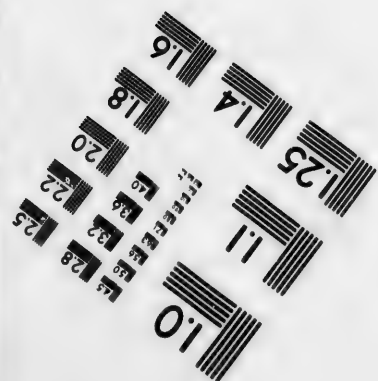
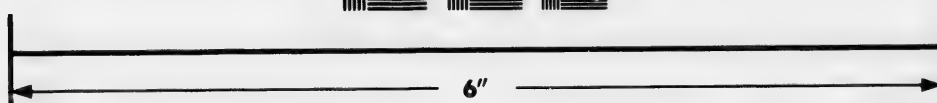
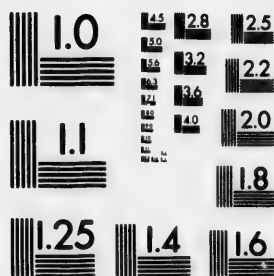


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placed. A small owl, perched on the tree near the spot, called forth many singular remarks from our companions, as to its being a good or bad omen.

We walked the whole of the 13th over flat meadow-land, which is much resorted to by the buffalo at all seasons. Some herds of them were seen, which our hunters were too unskilful to approach. In the afternoon we reached the Stinking Lake, which is nearly of an oval form. Its shores are very low and swampy, to which circumstances, and not to the bad quality of the waters, it owes its Indian name. Our observations place its western part in latitude $53^{\circ} 25' 24''$ N., longitude $107^{\circ} 18' 58''$ W., variation $20^{\circ} 32' 10''$ E.

After a march of fifteen miles and a half, we encamped among a few pines, at the only spot where we saw sufficient wood for making our fire during the day. The next morning, about an hour after we had commenced our march, we came upon a beaten track, and perceived recent marks of snowshoes. In a short time an Iroquois joined

us, who was residing with a party of Cree-Indians, to secure the meat and furs they should collect, for the North-West Company. He accompanied us as far as the stage on which his meat was placed, and then gave us a very pressing invitation to halt for the day and partake of his fare; which, as the hour was too early, we declined, much to the annoyance of our Canadian companions, who had been cherishing the prospect of indulging their amazing appetites at this well-furnished store, ever since the man had been with us. He gave them, however, a small supply previous to our parting. The route now crossed some ranges of hills, on which fir, birch, and poplar, grew so thickly, that we had much difficulty in getting the sledges through the narrow pathway between them. In the evening we descended from the elevated ground, crossed three swampy meadows, and encamped at their northern extremity, within a cluster of large pine-trees, the branches of which were elegantly decorated with abundance of a greenish yellow lichen.

Our march was ten miles. The weather was very mild, almost too warm for the exercise we were taking.

We had a strong gale from the N. W. during the night, which subsided as the morning opened. One of the sledges had been so much broken the day before in the woods, that we had to divide its cargo among the others. We started after this had been arranged, and finding almost immediately a firm track, soon arrived at some Indian lodges to which it led. The inhabitants were Crees, belonging to the posts on the Saskatchewan, from whence they had come to hunt beaver. We made but a short stay, and proceeded through a swamp to Pelican Lake. Our view to the right was bounded by a range of lofty hills, which extended for several miles in a north and south direction, which, it may be remarked, was that of all the hilly land we had passed since quitting the plain.

Pelican Lake is of an irregular form, about six miles from east to west, and eight from north to south; it decreases to the

breadth of a mile towards the northern extremity, and is there terminated by a creek. We went up this creek for a short distance, and then struck into the woods, and encamped among a cluster of the firs, which the Canadians term cyprès, (*pinus Banksiana*,) having come fourteen miles and a half.

February 16.—Shortly after commencing the journey to-day, we met an Indian and his family, who had come from the houses at Green Lake ; they informed us the track was well beaten the whole way. We therefore put forth our utmost speed in the hope of reaching them by night, but were disappointed, and had to halt at dark, about twelve miles from them, in a fisherman's hut, which was unoccupied. Frequent showers of snow fell during the day, and the atmosphere was thick and gloomy.

We started at an early hour the following morning, and reached the Hudson's Bay Company's post to breakfast, and were received very kindly by Mr. Mac Farlane, the gentleman in charge. The other esta-

blishment, situated on the opposite side of the river, was under the direction of Mr. Dugald Cameron, one of the partners of the North-West Company, on whom Mr. Back and I called soon after our arrival, and were honoured with a salute of musquetry.

These establishments are small, but said to be well situated for procuring furs; as the numerous creeks in their vicinity are much resorted to by the beaver, otter, and musquash. The residents usually obtain a superabundant supply of provision. This season, however, they barely had sufficient for their own support, owing to the epidemic, which has incapacitated the Indians for hunting. The Green Lake lies nearly north and south, is eighteen miles in length, and does not exceed one mile and a half of breadth in any part. The water is deep, it is in consequence one of the last lakes in the country that is frozen. Excellent tittameg and trout are caught in it from March to December, but after that time most of the fish remove to some larger lake.

We remained two days, awaiting the return of some men who had been sent to the Indian lodges for meat, and who were to go on with us. Mr. Back and I did not need this rest, having completely surmounted the pain occasioned by the snow-shoes. We dined twice with Mr. Cameron, and received from him many useful suggestions respecting our future operations. This gentleman having informed us that provisions would, probably, be very scarce next spring in the Athabasca department, in consequence of the sickness of the Indians during the hunting season, undertook at my request to cause a supply of pemmican to be conveyed from the Saskatchewan to Isle à la Crosse for our use during the winter, and I wrote to apprise Dr. Richardson and Mr. Hood, that they would find it at the latter post when they passed; and also to desire them to bring as much as the canoes would stow from Cumberland.

The atmosphere was clear and cold during our stay; observations were obtained at the Hudson Bay Fort, latitude

54° 16' 10" N., long. 107° 29' 52" W., var. 22° 6' 35" E.

February 20.—Having been equipped with carioles, sledges, and provisions, from the two posts, we this day recommenced our journey, and were much amused by the novelty of the salute given at our departure, the guns being principally fired by the women in the absence of the men. Our course was directed to the end of the lake, and for a short distance along a small river; we then crossed the woods to the Beaver River, which we found to be narrow and very serpentine, having moderately high banks. We encamped about one mile and a half further up among poplars. The next day we proceeded along the river; it was winding, and about two hundred yards broad. We passed the mouths of two rivers whose waters it receives; the latter one, we were informed, is a channel by which the Indians go to the Lesser Slave Lake. The banks of the river became higher as we advanced, and were adorned with pines, poplars, and willows.

Though the weather was very cold, we travelled more comfortably than at any preceding time since our departure from Cumberland, as we had light carioles, which enabled us to ride nearly the whole day, warmly covered up with a buffalo robe. We were joined by Mr. M'Leod, of the North-West Company, who had kindly brought some things from Green Lake, which our sledges could not carry. Pursuing our route along the river, we reached at an early hour the upper extremity of the "Grand Rapid," where the ice was so rough that the carioles and sledges had to be conveyed across a point of land. Soon after noon we left the river, inclining N.E., and directed our course N.W., until we reached Long Lake, and encamped at its northern extremity, having come twenty-three miles. This lake is about fourteen miles long, and from three quarters to one mile and a half broad; its shores and islands low, but well wooded. There were frequent snow-showers during the day.

February 23.—The night was very stormy,

but the wind became more moderate in the morning. We passed to-day through several nameless lakes and swamps before we came to Train Lake, which received its name from being the place where the traders procured the birch to make their sledges, or *traineaux*; but this wood has been all used, and there only remain pines and a few poplars. We met some sledges laden with fish, kindly sent to meet us by Mr. Clark, of the Hudson's Bay Company, on hearing of our approach. Towards the evening the weather became much more unpleasant, and we were exposed to a piercingly cold wind, and much snow-drift, in traversing the *Isle à la Crosse Lake*; we were, therefore, highly pleased at reaching the Hudson's Bay House by six P.M. We were received in the most friendly manner by Mr. Clark, and honoured by volleys of musquetry. Similar marks of attention were shown to us on the following day by Mr. Bethune, the partner in charge of the North-West Company's Fort. I found here the letters which I had addressed

from Cumberland, in November last, to the partners of the North-West Company, in Athabasca, which circumstance convinced me of the necessity of our present journey.

These establishments are situated on the southern side of the lake, and close to each other. They are forts of considerable importance, being placed at a point of communication with the English river, the Athabasca, and Columbia districts. The country around them is low, and intersected with water, and was formerly much frequented by beavers and otters, which, however, have been so much hunted by the Indians, that their number is greatly decreased. The Indians frequenting these forts are the Crees and some Chipewyans; they scarcely ever come except in the spring and autumn; in the former season to bring their winter's collection of furs, and in the latter to get the stores they require.

Three Chipewyan lads came in during our stay, to report what furs the band to which they belonged had collected, and to desire they might be sent for; the Indians

having declined bringing either furs or meat themselves, since the opposition between the Companies commenced. Mr. Back drew a portrait of one of the boys.

Isle à la Crosse Lake receives its name from an island situated near the forts, on which the Indians formerly assembled annually to amuse themselves at the game of the cross. It is justly celebrated for abundance of the finest tittameg, which weigh from five to fifteen pounds. The residents live principally upon this most delicious fish, which fortunately can be eaten for a long time without disrelish. It is plentifully caught with nets throughout the year, except for two or three months.

March 4.—We witnessed the Aurora Borealis very brilliant for the second time since our departure from Cumberland. A winter encampment is not a favourable situation for viewing this phenomenon, as the trees in general hide the sky. Arrangements had been made for recommencing our journey to-day, but the wind was stormy, and the snow had drifted too

much for travelling with comfort; we therefore stayed and dined with Mr. Bethune, who promised to render every assistance in getting pemmican conveyed to us from the Saskatchewan, to be in readiness for our canoes, when they might arrive in the spring; Mr. Clark also engaged to procure six bags^d for us, and to furnish our canoes with any other supplies which might be wanted, and could be spared from his post, and to contribute his aid in forwarding the pemmican to the Athabasca, if our canoes could not carry it all.

I feel greatly indebted to this gentleman for much valuable information respecting the country and the Indians residing to the north of Slave Lake, and for furnishing me with a list of stores he supposed we should require. He had resided some years on Mackenzie's River, and had been once so far towards its mouth as to meet the Esquimaux in great numbers. But they assumed such a hostile attitude, that he deemed it unadvisable to attempt opening any commu-

nication with them, and retreated as speedily as he could.

The observations we obtained here shewed that the chronometers had varied their rates a little in consequence of the jolting of the carioles, but their errors and rates were ascertained previous to our departure. We observed the position of this fort to be latitude $55^{\circ} 25' 35''$ N., longitude $107^{\circ} 51' 00''$ W., by lunars reduced back from Fort Chipewyan, variation $22^{\circ} 15' 48''$ W., dip $84^{\circ} 13' 35''$.

March 5.—We recommenced our journey this morning, having been supplied with the means of conveyance by both the Companies in equal proportions. Mr. Clark accompanied us with the intention of going as far as the boundary of his district. This gentleman was an experienced winter traveller, and we derived much benefit from his suggestions; he caused the men to arrange the encampment with more attention to comfort and shelter than our former companions had done. After marching eighteen miles we put up on Gravel Point, in the Deep River.

At nine the next morning, we came to the commencement of Clear Lake. We crossed its southern extremes, and then went over a point of land to Buffalo Lake, and encamped after travelling twenty-six miles. After supper we were entertained till midnight with paddling songs, by our Canadians, who required very little stimulus beyond their natural vivacity to afford us this diversion. The next morning we arrived at the establishments which are situated on the western side of the lake, near a small stream, called the Beaver River. They were small log buildings, hastily erected last October, for the convenience of the Indians who hunt in the vicinity. Mr. Mac Murray, a partner in the North-West Company, having sent to Isle à la Crosse an invitation to Mr. Back and I, our carioles were driven to his post, and we experienced the kindest reception. These posts are frequented by only a few Indians, Crees and Chipewyans. The country round is not sufficiently stocked with animals to afford support to many families, and the

traders subsist almost entirely on fish caught in the autumn, prior to the lake being frozen; but the water being shallow, they remove to a deeper part, as soon as the lake is covered with ice. The Aurora Borealis was brilliantly displayed on both the nights we remained here, but particularly on the 7th, when its appearances were most diversified, and the motion extremely rapid. Its coruscations occasionally concealed from sight stars of the first magnitude in passing over them, at other times these were faintly discerned through them; once I perceived a stream of light to illumine the under surface of some clouds as it passed along. There was no perceptible noise.

Mr. Mac Murray gave a dance to his voyagers and the women; this is a treat which they expect on the arrival of any stranger at the post.

We were presented by this gentleman with the valuable skin of a black fox, which he had entrapped some days before our arrival; it was forwarded to England with other specimens.

Our observations place the North-West Company's House in latitude $55^{\circ} 53' 00''$ N., longitude $108^{\circ} 51' 10''$ W., variation $22^{\circ} 33' 22''$ E.

The shores of Buffalo Lake are of moderate height and well wooded, but immediately beyond the bank the country is very swampy and intersected with water in every direction. At some distance from the western side there is a conspicuous hill, which we hailed with much pleasure, as being the first interruption to the tediously uniform scene we had for some time passed through.

On the 10th we recommenced our journey after breakfast, and travelled quickly, as we had the advantage of a well-beaten track. At the end of eighteen miles we entered upon the river "Loche," which has a serpentine course, and is confined between alluvial banks that support stunted willows and a few pines; we encamped about three miles further on; and in the course of the next day's march perceived several holes on the ice, and many unsafe places for the

sledges. Our companions said the ice of this river is always in the same insecure state, even during the most severe winter, which they attributed to warm springs. Quitting the river, we crossed a portage and came upon the Methye Lake, and soon afterwards arrived at the trading posts on its western side. These were perfect huts, which had been hastily built after the commencement of the last winter. We here saw two hunters who were Chipewyan half-breeds, and made many inquiries of them respecting the countries we expected to visit, but we found them quite ignorant of every part beyond the Athabasca Lake. They spoke of Mr. Hearne and of his companion Matonnabee, but did not add to our stock of information respecting that journey. It had happened before their birth, but they remembered the expedition of Sir Alexander Mackenzie towards the sea.

This is a picturesque lake, about ten miles long and six broad, and receives its name from a species of fish caught in it, but not much esteemed; the residents never eat

any part but the liver except through necessity, the dogs dislike even that. The tittameg and trout are also caught in the fall of the year. The position of the houses by our observations is latitude $56^{\circ} 24' 20''$ N., longitude $109^{\circ} 23' 06''$ W., variation $22^{\circ} 50' 28''$ E.

END OF VOL. I.

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COVER

ELL YARD,

MAP
SHOWING THE DISCOVERIES
made by
BRITISH OFFICERS
in the
ARCTIC REGIONS,
from the Year
1818 to 1826.

